Published every Saturday by the Simmons-Boardman Publishing Company, 34 North Crystal Street, East Stroudsburg, Pa., with executive offices at 30 Church Street, New York

All communications should be addressed to the New York office, 30 Church Street, or to the Chicago office, 105 West Adams Street

CHICAGO
105 West Adams St.

WASHINGTON
17th and H. Streets, N. W.

CLEVELAND
Terminal Tower

SAN FRANCISCO
215 Market St.

The Railway Age is a member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.)

Subscriptions, including 52 regular weekly issues and special daily editions published from time to time in New York, or in places other than New York, payable in advance and postage free; United States and Mexico, $6.00; Canada, including duty, $8.00. Foreign countries, not including daily editions, $8.00.

Single copies, 25 cents each.

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name Registered U. S. Patent Office

Vol. 92 January 23, 1932 No. 4

In This Issue

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service

"Responsibility for Railway Situation"

We publish elsewhere in this issue a letter to the *Railway Age* from Senator Couzens of Michigan, Chairman of the Senate Committee on Interstate Commerce, and also a letter written to Senator Couzens by Chairman Claude R. Porter of the Interstate Commerce Commission. They relate to an editorial entitled, "Responsibility for the Railway Situation," published in the *Railway Age* for December 12.

In our editorial we asserted that the commission's policy of regulation in the years 1922-1929, inclusive, "is the real reason why the railroad industry entered the depression with a general level of rates that was too low and why it is now in much worse condition than any other large industry." Senator Couzens says in his letter that Chairman Porter's letter "undoubtedly confirms some of your editorial," but that "it does not seem to sustain your editorial, at least fully." It will be observed that Chairman Porter's letter is merely an answer to an inquiry from Senator Couzens as to "whether the commission required a general reduction of rates in 1922, and also whether, prior to their application in the Fifteen Per Cent Case, 1931, the railroads made requests for increases in rates, which requests were denied by the commission." Let us review Chairman Porter's letter to determine to what extent it does sustain the *Railway Age's* editorial, and see what additional evidence can be offered in support of the editorial.

Chairman Porter refers first to reductions of freight rates made in 1922. Owing to the depression the railways in 1921, on the advanced rates fixed by the commission in 1920, earned a return upon the commission's own tentative valuation of only 3.13 per cent and upon property investment of only 2.87 per cent. At the end of 1921 the commission ordered a reduction of rates on grain and grain products which exceeded 10 per cent. The railways offered and actually put into effect, as a substitute for this, a general reduction of 10 per cent on agricultural products. The commission allowed both the larger reductions on grain and grain products previously ordered by it, and the general reduction of 10 per cent on other agricultural products, to remain in effect, and on July 1, 1922, put into effect a reduction of 10 per cent on other freight.

The difference of 12½ per cent between average revenue per ton-mile in 1921 and in 1923 was almost entirely due to these reductions. In the seven years 1923-1929 inclusive, the railways earned an average annual return of about 4¾ per cent on their property investment and of 5 per cent on the commission's own basis of valuation. These were years of unusual prosperity. Rates only slightly higher than those in effect would have produced an average return of 5¾ per cent on the commission's own basis of valuation. Therefore, the reductions made in 1922 are sufficient fully to account for the failure to earn a fair return during these years. It may be said that the traffic could not have borne higher rates. Average revenue per ton-mile in 1923-1929, inclusive, was 45 per cent higher than in 1901-1905, inclusive, the five years immediately preceding the adoption of effective federal regulation of rates, and if it had been 10 per cent higher than it was, would have been only 60 per cent greater than in 1901-1905, during which years traffic increased rapidly. Wholesale commodity prices averaged 68 per cent higher and prices of farm products 82 per cent higher in 1923-1929, inclusive, than in 1901-1905. Will anybody say, in view of these facts, that during 1923-1929 traffic would not have borne rates high enough to have enabled the railways to have earned the fair return that the Transportation act assured them they would be given opportunity to earn?

Chairman Porter next refers to the petition filed by the western lines in 1925 and denied in 1926 for a general advance of five per cent in rates. As statistics of commodity prices demonstrate that the freight traffic of the entire country easily could have stood freight rates averaging 10 per cent higher than those allowed by the commission to be charged, and as the advances in rates in western territory since before the war had been relatively much less than in the country as a whole, it necessarily followed that freight in western territory easily could have stood an advance of five per cent. In 1923 the western lines earned only 3.94 per cent on property investment, in 1924 only 3.87 per cent, and in 1925 only 4.13 per cent, and the commission conceded that they were earning much less than a fair return on its own basis of valuation.

Why, then, did the commission refuse to authorize a five per cent increase in western territory? Chairman Porter says, "the commission recognized that there were many inequalities in the rate structures existing in certain portions of the western district * * * and pointed out that it was the right and duty of the carriers to take the steps necessary to correct improper rate relationships and to supply revenue deficiencies by initiating suitable and specific changes in rates." These inequalities to which the commission referred existed also in 1922, when it made a general reduction of rates. If, because of these inequalities, no general advance was warranted in 1926, how, in spite of them, was a general reduction warranted in 1922? Why did the commission disregard them in 1922, when the question was one of reducing rates, and attach paramount importance to them in 1926, when the question was one of advancing rates?

Chairman Porter refers to changes authorized by the commission in western class rates which he says it roughly estimated at the time would yield from 10 to 12 million dollars increased revenues per year if the bases prescribed became effective on both interstate and intrastate traffic. Because of the way in which these readjustments were authorized, there has been a wide difference of opinion between the carriers and the commission as to the benefits that would be derived from them, and, anyway, they were far more than offset by the commission's order for a reduction in grain rates, which Chairman Porter does not mention, and which the Supreme Court has now held was not shown to be warranted at the time it was ordered.

"Following the reduction of 1922," says Chairman Porter, "there was a sharp increase in traffic and in net railway operating income for the carriers of the United States as a whole. Net railway operating income from freight per net ton-mile increased more than 44 per cent from 1923 to 1929." These developments were due to the recovery of general business following the depression of 1921-1922 and to great economies in operation that were effected, and the commission knew that, in spite of them, the railways were constantly failing, in a period of great prosperity, to earn a fair return, and therefore would inevitably earn much less than a fair return if a depression came. Nevertheless, in its opinion in the O'Fallon valuation case the commission so expressed itself as plainly to indicate it believed, although the rate-making provisions of the Transportation act were not being carried out by it, the railways were earning enough. Is it surprising, in view of its decision in the western five per cent case and what it said in its opinion in the O'Fallon case, that the railways considered that it would be futile to make further efforts to get it to authorize needed advances in rates?

"In numerous instances," Chairman Porter continues, "the carriers, because of competitive and commercial reasons, *had found it necessary* (italics are ours) to refrain from taking advantage of all opportunities to increase freight rates afforded by our decisions, and for like reasons had voluntarily reduced numerous rates." The commission knew of the competitive conditions and pressure from the big shippers to which the railways were subject. The Transportation act directs it to so *"initiate,* modify, establish or adjust" rates as to enable the carriers to earn a fair return. When it refused the western carriers a five per cent general increase why did it not specifically indicate the rates that it believed they could and should advance, and thus help to protect the railways from that "shipper terrorism" because of which the carriers, in Chairman Porter's own language "had found it necessary" to make and keep many rates too low? The correct answer undoubtedly is that the commission had the same fear of shippers that it criticized the railways for yielding to.

"It was not until 1930," Chairman Porter adds, "that there was a sharp falling off of traffic and earnings, and this did not operate to substantially affect railroad credit until the first part of 1931." If, however, the commission had allowed freight rates to be made only seven per cent higher throughout the years 1923-1931, inclusive, the railways would have earned an average of 5¾ per cent on the commission's own basis of valuation, or about $290,000,000 more net operating income annually than they did, and would have had, other things being equal, $280,000,000 more net operating income than they had in 1930 and $230,000,000 more than they had in 1931, and unquestionably, in consequence, their financial condition never would have become as desperate during the depression as it did.

The facts fully substantiate the contention made by the *Railway Age* in its issue for December 12 that the policy of regulation followed by the commission, beginning with its general reduction of rates in 1922, has been principally responsible for the railway situation that has developed during the depression. It is no answer to this contention to say that the commission could not have foreseen the depression. The commission knew and was constantly reminded that the Transportation act required it to so initiate and adjust rates as to enable the railways to earn a fair return, that year after year in a period of unusual prosperity they were not earning it, and it was its plain duty to authorize or initiate readjustments that would increase the net operating income being earned.

It is a disputed point whether readjustments downward which have been made subsequent to 1922 by the railways themselves have cost them more than the readjustments downward made by the commission. But it is beyond dispute that the reduction ordered by the commission in 1922, and its refusal of an advance in western territory in 1926, were of more importance than all other developments affecting the general level of rates and earnings that occurred, and, therefore, they were the developments which principally prevented the railways from earning during the ten years from 1922 to 1932 the return to which they were

lawfully entitled. The depression would have, regardless of the level of rates, greatly reduced railroad earnings, but it was the depression plus the commission's policy that caused the railroads in 1931 to earn the smallest net operating income in thirty years.

The Flynn Report

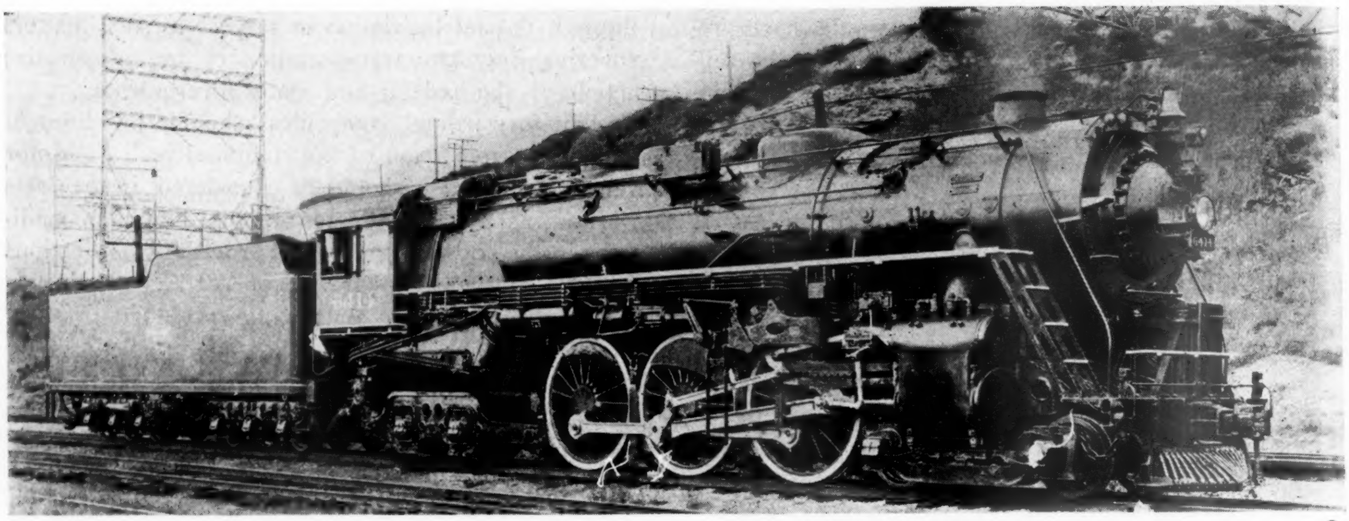
The proposed report of Examiner Leo J. Flynn in Docket 23,400, Co-Ordination of Motor Transportation, which was made public by the commission on January 5 and abstracted in the *Railway Age* of January 9, is a mine of information for anyone desirous of ascertaining the facts concerning the place now occupied by motor buses and motor trucks in the transportation system of the country.

For the present, the conclusions embodied in the proposed report are of major interest, because a number of them touch upon questions of policy which are being pressed for early determination. It is believed that those interested in the preservation of the railways in their full vigor, in the sound development of motor transport facilities and in the economic coordination of railway and highway transportation will find little in Examiner Flynn's conclusions to which they hold serious objection. On the contrary, the conclusions appeal to the unbiased as being consistently in tune with the requirements of the present situation.

To all, but particularly to law-makers, can be commended the following conclusions: "The national transportation machine cannot function with progressive efficiency, part regulated, part unregulated; coordination of transportation agencies cannot reach its economic possibilities under this anomalous condition. Regulation of the transportation of persons by motor vehicles for hire operating on public highways in interstate commerce should be provided for by law . . . Regulation of interstate transportation of property by motor vehicles for hire operating on public highways in interstate commerce should be provided for by law. Classification for the purposes of regulation should be made on the basis of: (a) those operating over regular routes or between fixed termini; (b) those operating as anywhere-for-hire common carriers; and (c) those operating as motor vehicle contract carriers. . . . . The commission should be authorized to fix minimum but not maximum rates to be charged by contract carriers engaged in the transportation of interstate commerce on the public highways, on a mileage or other basis sufficient to cover the cost of the transportation service performed, and rates so fixed should not include any compensation for accessorial service that may be rendered in addition to the transportation service performed . . . . There should be uniform regulation as to sizes, weights, speed, loads, lights and safety devices of all motor vehicles carrying persons for hire and of all motor vehicles carrying property over the public highways, either through federal legislation in respect to such matters covering interstate transportation or by co-operative action of the federal and state governments . . . . Freight-forwarding companies should be brought under the supervision of the commission . . . . Motor vehicle competition should be considered, if the facts warrant, as constituting substantially dissimilar conditions in the construction of the provisions of Sections 2 and 3 of the Interstate Commerce Act relating to unjust discrimination and undue prejudice, respectively . . . . The commission has no jurisdiction over matters of taxation, but the question of taxation of motor vehicles for hire operating on the public highways has so important an economic relation to the highway competition confronting carriers now subject to its jurisdiction that the commission should direct attention to the necessity for ascertaining whether or not motor carriers operating on the public highway for hire are contributing an amount commensurate with their use of such highways as places of business."

The conclusions quoted above, to the effect that comparable regulation of all carriers is necessary if there is to be sound co-ordination of all carriers, that motor trucks as well as motor buses should be subjected to regulatory authority, that the commission should be authorized to fix minimum rates to be charged by contract motor truck operators—to avoid chaotic rate conditions which exist at the present time because of lack of such regulation of rates—, that there should be an investigation of the tax situation, and that there should be a more liberal interpretation of Sections 2 and 3 of the Interstate Commerce Act, are of particular importance and are worthy of special note. This is especially true of the conclusion that motor vehicle competition should be considered, if the facts warrant, as constituting substantially dissimilar conditions in the construction of the provisions of Sections 2 and 3 of the Act relating to unjust discrimination and undue prejudice, for this appears to recognize the necessity for permitting the railways to take exceptional action in order to meet exceptional cases of competition.

To railway officers can be commended the following conclusions: "Railways should supplement their transportation services by using motor vehicle transportation in co-ordination with their rail services, wherever this will result in economies of operation or betterment of service, or both . . . . Present railroad classification, particularly in the matter of packing requirements and rules in respect to carload commodity mixtures, should be studied with a view to liberalization and the reducing of transportation costs to the shipper wherever changes can be made without an ensuing undue increase in loss or damage claims . . . . Railroads should consider whether economy and efficiency of transportation can be promoted by utilizing the Railway Express Agency as a medium for handling all less-than-carload freight, with expedition in service and reduction in charges to the shipper."



The First of Eight New Milwaukee Class F6-a Locomotives Built by Baldwin

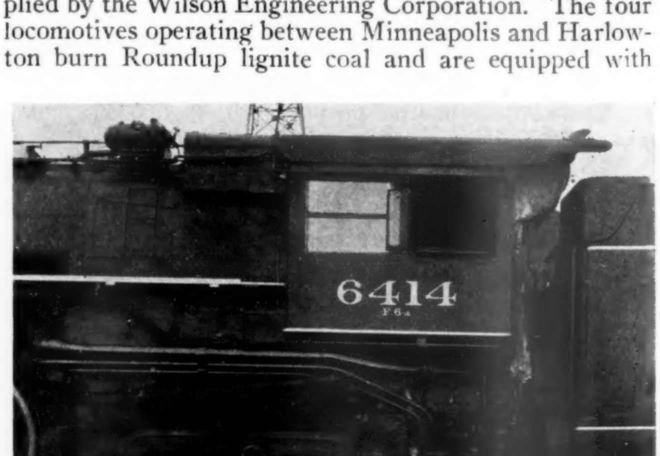
New Milwaukee Locomotives Notable for Refinements in Design

Eight additional units will provide modern power for all important passenger runs out of Chicago

EARLY in 1930, the Chicago, Milwaukee, St. Paul & Pacific received from the Baldwin Locomotive Works 14 passenger locomotives of the 4-6-4 type, which were described in an article beginning on page 559 of the *Railway Age* issue of March 1, 1930. These locomotives, known as Class F6 and numbered 6400 to 6413, inclusive, were placed in service on the most important trains between Chicago and the Twin Cities, Minn., replacing lighter Pacifics which were built in 1910. They were provided with modern appliances, including stokers, had tenders of large capacity, and were fully equipped with mechanical pressure lubrication to facilitate making the entire run of 420 miles between the two points without terminal attention to the locomotives en route.

The service obtained with the F6 locomotives was so satisfactory that eight additional locomotives of the same general type, but possessing certain important refinements in design and designated Class F6-a, were ordered from Baldwin. All of these locomotives have now been delivered and are in regular service. By pooling four of them with the 14 Class F6 locomotives first delivered, strictly modern power is available for all important passenger runs between Chicago and the Twin Cities, 420 miles; and between Chicago and Omaha, Neb., 487 miles. The remaining four Class F6-a locomotives are used in passenger train service between Minneapolis and Harlowton, Mont., a distance of 914 miles.

Like the earlier locomotives of the same general design, the Class F6-a locomotive is equipped with the Type-E superheater and American multiple throttle; three Nicholson Thermic syphons in the firebox and combustion chamber; Commonwealth one-piece bed frame and cylinders, water-bottom tender frames, one-piece truck frames, etc. The trailer and tender truck wheels are equipped with the American Steel Foundries roller-bearing type, equipped with Shafer roller bearings, and the tender trucks having simplex clasp brakes. A Dupont Simplex modified Type-B mechanical stoker is installed, also an Alco power-reverse gear with poppet valves furnished by the Transportation Devices Corporation. A feature of all of the F6-a locomotives is the inclusion of the Locomotive Water Conditioner supplied by the Wilson Engineering Corporation. The four locomotives operating between Minneapolis and Harlowton burn Roundup lignite coal and are equipped with



Close-Up View of the Roller-Bearing Trailer Truck, Wilson Centrifugal Water Pump and 6-in. Exhaust Steam Line to the Tender, Including Kiel Flexible Metallic Joints

Cyclone spark arresters, furnished by the Locomotive Firebox Company, to permit using this fuel without throwing sparks.

Mechanical Details Receive Careful Study

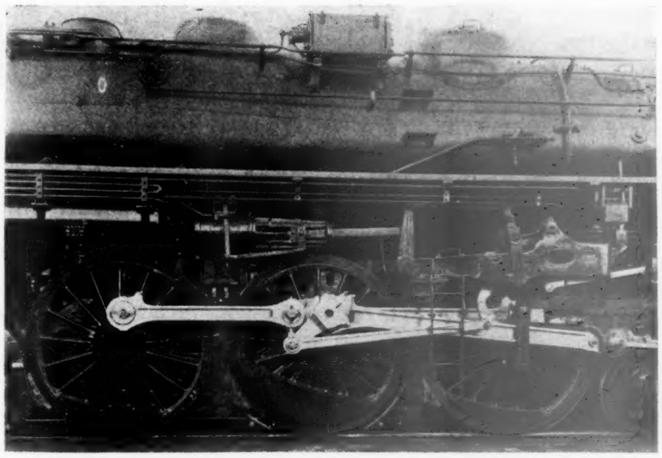
To improve the appearance of the Class F6-a locomotive, the running boards extend in a straight line from the cab to the front end. To accomplish this, the air compressor was removed from the boiler just ahead of the firebox and located on the left side of the front deck under the smoke arch, being supported on a bracket cast integral with the engine bed. The power-reverse gear, instead of being supported by a bracket attached to the boiler, is supported by a bracket attached directly to the engine bed. Air reservoirs of suitable size were selected to permit mounting them under the straight running board.

The running boards are of the open-work Safkar design, made by the Irving Iron Works. They provide a safe, non-skid surface, which will not collect snow or cinders and which provides increased air circulation around the air-brake cooling coils.

Particular attention was given to the bracing of the cab to hold it rigid, avoid loosening, and eliminate noise. Brass sash is used for the side windows with close-fitting guides and runways to avoid rattling, and back drop windows are equipped with anti-rattling devices. The cab ventilator is of the sliding type, but equipped with a rack, which engages with a pinion, the handle of which is conveniently located to the fireman. Adjustable inner-spring leather-upholstered cab seats are provided. Ample steam radiation is available to heat the cab comfortably in severe weather. Close-fitting cab curtains are of the company's standard design.

The Cleveland low-water alarm is used, mounted on the left side of the dome. Wilson air-operated blow-

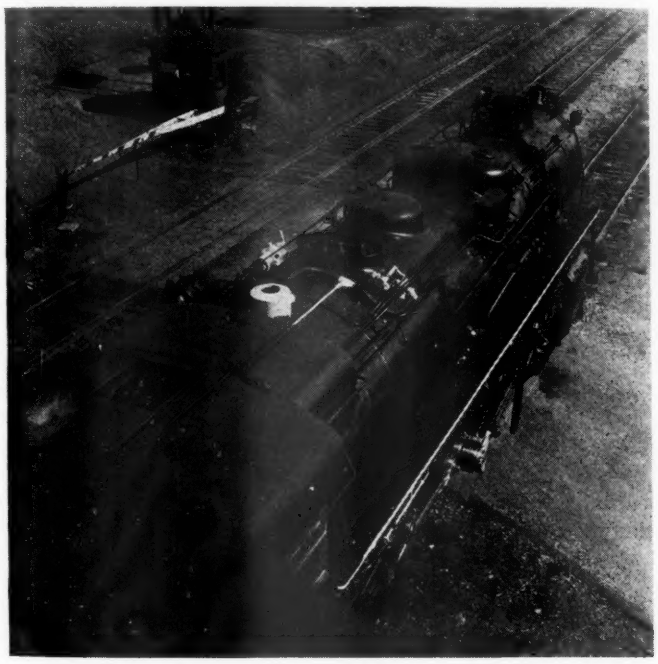
(Continued on page 166)



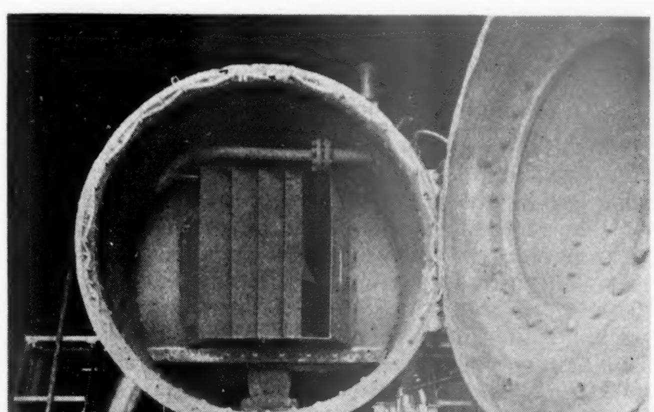
Side View Showing Machinery Details, Including Webbed Spokes in the Main Driving Wheel

Principal Dimensions and Weights of the Chicago, Milwaukee, St. Paul & Pacific Class F6-a 4-6-4 Type Locomotives

Railroad	Chicago, Milwaukee, St. Paul & Pacific
Builder	Baldwin Locomotive Works
Service	Passenger
Rated maximum tractive force	45,822 lb.
Weight on drivers ÷ maximum tractive force	4.25
Cylinders, diameter and stroke	26 in. by 28 in.
Valve gear, type	Baker
Weights in working order:	
On drivers	195,000 lb.
On front truck	77,510 lb.
On trailing truck	107,710 lb.
Total engine	380,220 lb.
Total engine and tender	668,000 lb.
Wheel bases:	
Driving	14 ft.
Total engine	40 ft. 9 in.
Total engine and tender	81 ft. 7½ in.
Wheels, diameter outside tires:	
Driving	79 in.
Front truck	36 in.
Trailing truck	43 in.
Boiler:	
Steam pressure	225 lb.
Fuel, kind	Soft coal
Diameter, front ring, inside	80⅜ in.
Firebox, length and width	120 in. by 96 in.
Tubes, number and diameter	58—2¼ in.
Flues, number and diameter	182—3½ in.
Length over tube sheets	19 ft.
Grate area	80 sq. ft.
Heating surfaces:	
Firebox and combustion chamber	307 sq. ft.
Arch tubes	14 sq. ft.
Thermic syphons	90 sq. ft.
Tubes and flues	3,794 sq. ft.
Total evaporative	4,205 sq. ft.
Superheating	1,815 sq. ft.
Comb. evap. and superheat	6,020 sq. ft.
Tender:	
Water capacity	15,000 gal.
Fuel capacity	20 tons



Unusual Overhead View Showing Centrifugal Blow-Down Muffler, Open-Work Running Board, Air-Operated Blow-Off Cock, Low-Water Alarm, Train Control Equipment Box, Etc.



Cyclone Spark Arrester Application Used on Four of the Class F6-a Locomotives Operating in Western Territory

The Future of the Railways*

**New era in history of railroads began on January 1—
Insistence upon improved regulation will
insure well-being of industry**

By Samuel O. Dunn
Editor, Railway Age

WE entered a new era in the history of American railroads on January 1, 1932. At the end of 1931 the situation of our railways was, in most important respects, the worst ever known. The average return earned upon property investment in 1893, when a larger part of our railroads became bankrupt than in any other year, was 3.2 per cent, while in 1931 it was only about 2 per cent. Never was the percentage of return earned upon railroad investment so small. Never did railroad securities sell at such low prices. Never were such retrenchments made. Never, in consequence, were purchases so reduced and so many railroad men thrown out of employment.

We may face the new year with hope that it will be better in the railroad industry than that which has just passed. An advance in freight rates estimated at $100,-000,000 annually has just gone into effect, and there is in immediate prospect a reduction of wages estimated in excess of $200,000,000. We may reasonably expect in view of all past experience and changes in business that are occurring, that freight traffic will increase more or less, and if this expectation proves correct, both the railway situation and the situation of railway equipment and supply manufacturing companies, dependent upon the railways for their market, will improve.

But the railroad problem has not been solved. Both the rate advance and the wage reduction will be temporary. Permanent remedies must be found and applied. Those of us who are closely identified with the railroad industry must not rely upon others to determine what the remedies are and to get them applied. The future of the railways will be determined mainly by railway financiers, railway officers and employees and other persons who understand railroading and have a direct interest in the solution of the railroad problem.

Accomplishments During 11 Years

Probably we can best anticipate the experience of the future, and most intelligently decide how to make that experience more satisfactory than that of the past, by considering experience in the recent past and the reasons for it. Between 1919 and 1930 railroad investment increased from $19,300,120,000 to $26,051,-000,000 or about $6,750,000,000. Meantime, railroad capitalization increased only $3,244,000,000, or less than one-half as much, indicating that more than $3,507,-000,000 of earnings were invested in the properties without being capitalized. No such conservatism in financing was shown by any of our governments or by any other large industry.

In 1919 operating expenses were $4,400,000,000, and in 1930 only $3,931,000,000, a reduction of $469,000,-000; but the changes in operating expenses that occurred were much greater and more important than these figures indicate. Of the total reduction mentioned, $191,500,000 was made in other items and $277,-500,000 in wages. How, in the face of increases in wages, was the total amount of wages paid reduced? The answer to this question affords the most illuminating and convincing evidence possible of the great increase in the efficiency and economy of operation that was effected during the 11 years following the restoration of the railways to private management.

The total number of employees in 1919, under unified government operation, was 1,913,422, and the average number of hours worked by each employee was 2,630. The number of employees in 1930 was only 1,487,730, and the average number of hours worked by each employee was 2,527. If the railroads had employed labor as many hours in 1930 as they did in 1919, and paid the average hourly wage of 1930, their total payroll in 1930 would have been $3,412,000,000. The actual payroll in 1930 was $2,551,000,000. Therefore, the *constructive* saving in wages in 1930, as compared with 1919, due to the reduction in the number of hours that labor was employed, was more than $961,000,000. Add to this the actual reduction in other expenses of $191,500,000, and we have a total constructive reduction in operating expenses in 1930, as compared with 1919, of about $1,153,-000.000.

New Investment Earned Large Return

I have sometimes heard it intimated that one reason for the financial difficulties of the railways during this depression has been that they invested too much capital and issued too large a volume of securities during the period of active general business. If, however, they had not made this large investment in improvements, they could not have made the huge economies in operation that they effected. Allowing in these calculations for the effect of the increase in the average wage per hour, the figures show that the economies in operation represented by the results of 1930, as compared with those of 1919, would have paid a return of 35 per cent upon the entire increase in railroad capitalization in 1930, as compared with 1919, and a return of 17 per cent upon the entire increase in investment.

What Railway Transportation Cost the Public

Now, let us see what changes occurred in what the public paid and the railways and railway investors received following the effecting of these economies: In calculating the total net amount that the public paid for railroad service, we must give weight to some factors besides the total earnings, and especially to taxes. In 1919, when the railways were under government

* From an address delivered before the Western Railway Club in Chicago on January 18.

operation, their net return was guaranteed. Their total earnings were $5,144,795,000. If we add to this amount the deficit of about $510,000,000 which they incurred, and which had to be paid by the taxpayers of the country, and then subtract the $232,601,000 that they paid in taxes, we find that the net amount that the public paid for its railway transportation in 1929 was $5,422,194,000. There were, of course, no government guarantees in 1930. When we deduct from the $5,281,197,000 of total earnings made last year the $348,554,000 that the railways paid in taxes, we find that the net amount paid by the public for its railway transportation was $4,932,643,000, or almost $490,000,000 less than in 1919.

You have often heard the claim that the public cannot afford to continue private ownership and management of railways because, under that policy, the cost of railway transportation is constantly increasing. The figures I have given demonstrate, however, that in 1919, the last year of government operation, railway transportation actually cost the people about a half billion dollars more than it did in 1930.

Another assertion frequently made is that freight rates have been largely advanced since the railways were returned to private operation and are still being advanced. How much higher were they actually in 1930 than in 1919, and how much did their increase cost those who paid them? Average revenue per ton-mile in 1919, when a large deficit was incurred under government operation, was 0.973 cent, and in 1930 it was 1.063 cents, an advance of 9.2 per cent. Applied to the freight business of 1930, this advance in rates cost shippers in that year about $325,000,000, or $100,000,000 less than the increase in the average hourly wage made between 1919 and 1930 cost the railways in 1930. Consequently, if there had been no advance in rates and no advance in wages, the railways would have earned about $100,000,000 more net operating income in 1930 than they did. Railway employees, through the increase in their average hourly wage, got that much more in 1930 than all the increased revenue resulting from the difference between the average freight rates of 1919 and 1930.

The increase in the average hourly wage was 20 per cent, while the increase in the average freight rate was only 9 per cent. Obviously, the railways could not forever stand such large advances in wages without advances in rates, and nothing could be more conclusive evidence of the increase in their efficiency of operation than the fact that they stood a 20 per cent increase in wages with only a 9 per cent increase in freight rates, while greatly improving their service and suffering a loss of a half billion dollars annually in the total net amount that the public paid for that service.

Railways Gained Nothing

What did the railways gain by the large increase in their investment, the improvements in their service and the huge economies effected? Less than nothing at all. In 1919 they earned $455,000,000 net operating income and received about $501,000,000 under the government guarantees which were based upon the average earned annually by them in the three years ending with 1917—a total available for paying interest and dividends of about $956,000,000. In 1930, after having increased their investment almost $7,000,000,000, they earned a net operating income of only $869,000,000, or 3.27 per cent upon their investment.

But, it will be said, 1930 was a year of depression. Yes, it was a year of depression, and freight business declined 14 per cent; but in spite of that the railways handled more freight than in 1919, rendered better service, paid more taxes, paid the highest average hourly wage in history, and incurred operating expenses of almost a half billion dollars less than in 1919. Why, then, even if 1930 was a year of depression, should they have got a much smaller return upon an investment of about $26,000,000,000 than they got in 1919 (including government guarantees) upon an investment almost $7,000,000,000 smaller? And why, pursuing the matter a little farther, did they, in 1931, even though it was the year of severest depression in history, earn a net operating income smaller than they earned in 1902 upon an investment less than one-half as large as that of 1931?

This comparison of the experience of the railways in 1919, the last year of government operation and the last before the Transportation Act was passed, and in 1930 and 1931, so long after it was passed, brings us to the crux of the railroad problem of the future. The Transportation Act was passed to restore the railways to private operation and to solve the railroad problem under the policy of private ownership and management. The facts that I have given show that the Transportation Act has utterly failed too accomplish its purpose, and that the railroad situation and problem are more serious and difficult now than they were before it was enacted. Why did the railways, with such a record of achievement in conservative financing, improvement in service and increases in the efficiency and economy of operation, earn such small returns in 1930 and 1931, and especially in 1930, when their freight business was only 14 per cent smaller than the maximum reached by it in 1929? The answer to that question is to be found in the record of the years from 1922, when a general reduction of freight rates was made, to 1929.

"Fair Return" Never Reached

The Transportation Act assured railway investors and managers that, if operation was honest, efficient and economical, the Interstate Commerce Commission would so initiate and adjust rates as to enable the railways to earn annually, "as nearly as may be," a fair return upon a fair valuation, and the commission held that a fair return would be 5¾ per cent. The phrase in the law "as nearly as may be" plainly meant that the return made in any year might be somewhat more or somewhat less than a fair return. The net result of all that was done was that it was always less. Calculating on the basis of property investment, an average return of 5¾ per cent would have produced an average net operating income in the 11 years ending with 1931 of $1,400,000,000 annually. Calculating on the commission's own valuation basis, it would have produced an average of $1,274,000,000 net operating income annually. The net operating income actually earned averaged only $959,000,000, or 3.95 per cent on property investment and 4.33 per cent on the commission's own basis of valuation. The railways actually earned an average of $315,000,000 a year less than the commission itself held that they were entitled to earn, in spite of all the great economies and improvements in service made.

That progress in developing the art of railroad transportation—in improving service and effecting economies—will be arrested until this condition is corrected requires no demonstration. The advances in freight rates recently authorized by the commission, the recent decision of the Supreme court reversing the commission's decision in the grain rate case, and the prospective general reduction in railway wages are already tending to

correct it. But much more than these things must be done if progress in railroading is to be revived.

The necessity for reviving progress in railroading is greater than it ever was. Commodity prices have declined, and owing to this and the competition of other carriers, general increases in freight rates cannot reasonably be expected in the future, although increases on numerous specific commodities may be justifiable and unwarranted reductions must be successfully resisted. Large economies in operation must continue to be effected, and every practicable means to that end must be adopted. Freight and passenger service must be radically changed and improved. Conditions must be met that present great problems, but also great opportunities, to the managements of both the railways and of the railway equipment and supply manufacturing industries. It is probably no exaggeration to say that the present railway plant must be made obsolete by revolutionary changes in rolling stock and in permanent structures. The necessary improvements must be initiated principally by the manufacturers; but railway officers must be ready open-mindedly to test in service every improvement in equipment or devices that is offered to them, and to adopt and install it as soon as its merits have been proven.

But whence are to come the means for making these improvements? Improvements to better service and reduce expenses must practically all be made by the investment of new capital; and the huge amounts of capital required to revolutionize the physical plants of our railways cannot be raised unless the confidence of investors in the future of the railroads is re-established.

It is the function of management to initiate and carry out the policies necessary to improving the conditions of an industry, and we frequently hear it said that if the managements of the railroads would meet competition as the managements of companies engaged in other lines of business do, the railroads would get along all right. The trouble with that statement, as it is usually meant, is that it puts the entire responsibility for railroad management upon those who have only part of the power of management. The fact is that our railroads now have two managements. The words "regulation" and "management" as applied to them have become misnomers.

Commission Not Content to Regulate

The Interstate Commerce Commission is no longer merely a regulating body. It is exercising more and more of the power, and performing more and more of the functions, that are exercised and performed in other industries by the managements, and proposals are now being made for increasing its powers; such, for example, as giving it the power to regulate the amount of dividends that may be paid. Most of the people of this country profess to fear the results of government management of railways, and say that we must spare no effort to avoid it. They overlook the fact that we already have a very large measure of government management; and the question as to whether the railroad problem can be solved is largely the question as to whether any industry can be successfully conducted under two managements; and, if not, as to which management shall give in. The most fundamental principle of railroading that can be stated is one that is being constantly disregarded in our so-called "regulation," and is that the kind of service a railroad can render and the rates it can afford to accept are determined by every single thing that is done which affects its development, maintenance or operation. One of the most prevalent, entirely fallacious, and most destructive theories regarding railroading is that there is little or no interdependence between the figure of net operating income and the figures of operating expenses. The net operating income is regarded as merely the part of the earnings that is available to be paid out in interest and dividends to the owners of funded securities and stock, and it is subjected to what is called "regulation" on the assumption that the only effect of limiting or reducing it is to limit or reduce the amount of interest and dividends that can be paid. It is assumed that while, if no dividends, or even interest, are paid, the effects upon the owners of securities will be disastrous, there will be no adverse effects upon the service that can be rendered or the rates that the public will have to pay. There is the closest possible relationship and interdependence between the net operating income earned, on the one hand, and the service that can be rendered and the operating expenses that must be incurred, on the other hand, because the net operating income alone determines how much capital can be raised for improvements.

What Determines Kind of Service Rendered

But what have what we ordinarily call the "managements" of our railways to say about how much net operating income they shall earn? Almost nothing at all. They can effect every reduction of operating expenses within their power, and the Interstate Commerce Commission, by the stroke of a pen, can make a reduction of rates which will prevent the economy effected from resulting in any increase whatever in the net operating income earned. The solution of the great problem of reviving and continuing the development of the art of railroad transportation will never be accomplished until we find a way to stop something that has been going on for 25 years—that is, a decline in the percentage of return earned on railroad investment in every period of prosperity as compared with the return earned in the last preceding period of prosperity, and a decline in the percentage of return earned on investment in every period of depression as compared with the last preceding period of depression, until finally in 1931 the return became only two per cent, the lowest in all railroad history.

This downward trend of the percentage of return earned upon railroad investment has been attributed to various causes. The fact is that the trend of the return earned was upward from the end of the depression of the nineties until 1906, in which year effective federal regulation of railways was begun, and then turned downward from 1906 until the adoption of government operation at the end of 1917, although throughout this entire time from 1897 to the end of 1917 both passenger and freight traffic were growing rapidly. What changed the trend after 1906, unless it was regulation?

The failure to earn a fair return under the Transportation Act also has been attributed largely to "whittling" of the rates by the railways themselves and to the increasing competition of other means of transportation. The Interstate Commerce Commission undoubtedly is right in saying that fear of big shippers has caused the railways to reduce many rates that should not have been reduced and to fail to seek advances in many rates that should have been advanced. It remains true, nevertheless, that with freight rates averaging only 7 per cent higher throughout the decade ending with 1930 than those actually in effect, the railways would have earned an average of 5¾ per cent on the commission's own basis of valuation; that it was the commission that caused a 10 per cent reduction of rates in

(Continued on page 169)

Wage Parley Opens at Chicago

Sympathetic consideration given to labor program—Conference may continue another week

A MOST friendly spirit has been displayed by the representatives of the railways and of the labor organizations during the wage negotiations which started at Chicago on January 15, and while definite agreement has not yet been reached on all of the matters involved, both parties have been brought in accord on certain of the proposals included in the labor representatives' program which has been under consideration this week. The propositions upon which both look with favor include some form of stabilized employment, the regulation of motor transportation and freight forwarding companies, and the establishment of employment bureaus.

The negotiations were scheduled to start on January 14, but were postponed until the afternoon of January 15th, when the labor organization executives contended that the present negotiations should be construed as coming under the Railway Labor Act, so that, in the event of a disagreement, group mediation proceedings would start immediately, thereby forestalling negotiations between an individual road and its employees. The railways prefer to consider the conference as a separate proceeding so that in the event of their failure to secure an agreement on the 10 per cent reduction in wages, they would be free to commence individual negotiations. While the question was not settled prior to the meeting, the conference opened with the understanding that the question would not be discussed further unless the conference failed to agree on the matters under consideration.

Another matter that was decided before the opening of the meeting was the status of applications of the various roads for the 15 per cent reduction in wages, negotiations on which are scheduled to start before the present negotiations will be concluded, since notices were filed on December 21. This matter was settled when the railroad presidents' committee, speaking for all of the railroads, agreed that no action would be

The Committee of Nine Railway Presidents and 192 Employee Representatives in the Conference Rooms at the Palmer House, Chicago

The railroad presidents, seated on the farther side of the table, are, from left to right: C. A. Wickersham, A. & W. P.; H. D. Pollard, C. of Ga.; J. E. Gorman, C. R. I. & P.; L. W. Baldwin, M. P., L. A. Downs, I. C; Daniel Willard, B. & O.; J. J. Pelley, N. Y., N. H. & H.; A. C. Needles, N. & W.; and C. E. Denney, Erie.

Seated on the near side of the conference table are the executives of the 22 labor organizations. These are C. M. Sheplar, National Marine Engineers' Beneficial Association; Captain Michael H. McClain, National Organization Masters, Mates and Pilots of America. L. M. Wicklein, Sheet Metal Workers' International Association; M. S. Warfield, Order of Sleeping Car Conductors; James F. McGrath, International Brotherhood of Firemen and Oilers; C. J. McGlogan, International Brotherhood of Electrical Workers; Roy Horn, International Brotherhood of Blacksmiths, Drop Forgers and Helpers; J. G. Luhrsen, American Train Dispatchers' Association; A. O. Wharton, International Association of Machinists; J. A. Franklin, International Brotherhood of Boilermakers, Iron Ship Builders and Helpers of America; F. H. Fljozdal, Brotherhood of Maintenance of Way Employees; Geo. M. Harrison, Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees; D. B. Robertson, Brotherhood of Locomotive Firemen and Enginemen; B. M. Jewell, Railway Employees' Department, American Federation of Labor; A. Johnston, Brotherhood of Locomotive Engineers; D. W. Helt, Brotherhood of Railroad Signalmen of America; E. J. Manion, Order of Railroad Telegraphers; S. N. Berry, Order of Railway Conductors; A. F. Whitney, Brotherhood of Railroad Trainmen; Martin F. Ryan, Brotherhood of Railway Carmen of America; T. C. Cashen, Switchmen's Union of North America; J. J. Noonan, International Longshoremen's Association.

The observers include 48 transportation employees, 72 shop craft employees, 10 maintenance of way employees, 4 stationary firemen, 10 clerks, 12 signalmen, 4 sleeping car conductors, 2 master mates, 2 pilots, 2 marine engineers and 3 longshoremen.

taken on these individual petitions until the present negotiations are concluded, and the brotherhood representatives have had an opportunity to return to their homes and prepare for negotiations.

Robertson Presents Labor Program

Daniel Willard, president of the Baltimore & Ohio, and chairman of the railroad presidents' committee of nine, called the conference to order on the afternoon of the first day, and made an opening statement, after which D. B. Robertson, president of the Brotherhood of Locomotive Firemen and Enginemen, and chairman of the executive committee of the Railway Labor Executives Association, presented the employees' program for unemployment relief and stabilization of employment. Mr. Robertson's presentation dwelt upon the insecurity of employment, diminishing employment and wages inadequate to provide reasonable living conditions and to protect against disability and unemployment. To stabilize employment, he contended that work can be budgeted for the year and spread evenly, that an average force should be assured employment for one year and that at least part-time employment should be assured to the stand-by force necessary for heavy traffic periods. He also contended that where a fluctuating and uncertain volume of traffic calls for the expansion and contraction of forces somewhat irregularly, it should be possible to establish minimum forces assured of full-time employment for one year and assure the necessary stand-by forces of a certain amount of part-time employment in one year.

"If employment could be stabilized by a common program through the industry," he said, "the excessive number of men now furloughed by each road, who earn annually far less than even a living wage, could be reduced materially. Then it might be possible to create a mobile force of extra workers, shifting from one road to another somewhat as Pullman cars and freight cars are shifted to meet traffic requirements. Nothing less than a co-ordinated effort of all employers and employees could accomplish such an assurance of practically full-time employment for all experienced employees. But this achievement without an increase in rates of pay would raise considerably the actual average earnings of the employees; and would increase substantially the efficiency of labor, while decreasing the labor cost of all railroads by reducing the turnover and improving the quality and morale of the employees."

National Placement Bureau Recommended

Mr. Robertson also recommended a national placement bureau for the purpose of relocating employees separated from the service of a railroad because of permanent reductions of force and to provide for the temporary transfer of employees to extra work produced by seasonal or other temporary increases of traffic. "In order thus to stabilize employment without a vast amount of individual hardship," he said, "it will be necessary to deal with the problem of diminishing employment so as to absorb between 200,000 and 300,000 unemployed men now dependent on the industry, but without reasonable expectation of re-employment even in a revival of past-traffic volume."

He contended that the principal method which should be adopted in dealing with diminishing employment is the shortening of the hours of labor. He said that present revisions to protect against temporary or permanent disability are largely either voluntary deductions from wages to pay for insurance or voluntary pension payments by some railroads. He recommended an elective federal compensation law to indemnify against occupational accidents and diseases, and a federal law to provide retirement insurance.

As immediate measures, in line with the principles of the permanent program, he asked that employment be stabilized by assuring one year of employment to the necessary employees in each class by putting to work as many men as possible consistent with maintaining satisfactory conditions in the respective classes of employment and by assuring the necessary stand-by forces of a minimum amount of part-time employment.

"Since the six-hour day is necessary," he continued, "and must be instituted to absorb the existing number of experienced employees without reduction of compensation, a commission should be created to determine the ways and means of applying this principle to the different classes of employees. Such a commission should be created by the nomination of an equal number of representatives of management and employees, with the designation of a chairman from its membership by the Interstate Commerce Commission. Any legislation necessary to establish the commission and to endow it with adequate authority to make a comprehensive study as a basis for a report to be made within a definite period should be sought by joint action, so far as possible, by the carriers and the employees."

He also recommended that joint action be undertaken between managements and employees to promote a billion dollar federal bond issue for grade crossing elimination on main traveled highways, one-half of the cost to be borne by the government and the other half by the railroads, and to be repaid by interest and sinking fund payments sufficient to retire the bonds in 50 years; the regulation of motor transportation and freight forwarding companies; the protection of all interests in railroad consolidation; federal legislation to provide retirement insurance and elective workmen's compensation; the establishment of an emergency employment bureau to prepare the way for the eventual establishment of a national placement bureau and to provide means for placing unemployed rail workers as additional opportunities for employment may develop; and the co-ordination of train crews and train lengths on the basis of economical and safe operation.

Mr. Willard Presents Railroads' Proposition

Following Mr. Robertson's presentation of the labor program, Mr. Willard outlined the proposal of the carriers in a brief statement, "that ten per cent be deducted from each pay check for a period of one year. Basic rates to remain as at present. This arrangement to terminate automatically 12 months after the plan becomes effective unless extended by mutual agreement."

He traced the relationship between the prosperity of the country and that of the railroads, showing that the financial well-being of the roads was the best security for the continued well-being of their employees, contending that if the employees will accept a 10 per cent cut in their wages for one year, the industry will be given a fresh impetus and an opportunity to pass through the depression successfully. He also called attention to the financial condition of many railroads and the resulting depreciation of railroad investments and showed the large number of people dependent upon the success of the railroads.

Mr. Willard said that if the railroads are permitted to reduce wages 10 per cent, the additional money derived will aid in reviving national prosperity and that employment will be stimulated and increased. He also

(Continued on page 175)

Flexible Rate-Making Rule Favored by I. C. C.

Also advocates repeal of the recapture clause from the very beginning

WASHINGTON, D. C.

COMPLETE abandonment of a percentage on either a "valuation" or a "rate base" as a foundation for a general rate-making rule to be observed by the Interstate Commerce Commission, and repeal of the recapture clause from the beginning, were suggested by Commissioner Joseph B. Eastman on behalf of the commission on January 19 at a hearing before the House committee on interstate and foreign commerce. Mr. Eastman appeared as chairman of the commission's legislative committee to express its views on the bills, H.R. 7116, and H.R. 7117, introduced by Chairman Rayburn of the committee as alternative substitutes for Section 15a, which the commission has found to be "impracticable" for twelve years, and which it would like to have replaced with a more flexible rule.

Both bills were drafted from language furnished by Commissioner Eastman and he indicated that both would be acceptable in general to the commission. It was developed at the hearing, however, that both contain some provisions differing from what the commission would prefer proposing to repeal recapture only for the future, and Commissioner Eastman said that he believed the concensus of opinion among the commissioners prefers the shorter bill, H.R. 7117, which tells the commission in general to do the best it can to H.R. 7116, which contains the rate base formula.

Commission Prefers Simple Bill

Although the plan for substituting a rate base representing approximate investment for the fair value of the present law was advocated by a majority of the commissioners in a report to the Senate committee last year, and was again recommended by the commission in its recent annual report to Congress, Commissioner Eastman said that so far as a majority of the commission are concerned, they are now quite willing to accept H.R. 7117, which does not contain the rate base formula. The only exception is Commissioner McManamy, who believes, Mr. Eastman said, if he understood his position, that the commission should be given by Congress a more definite guide than H.R. 7117 would supply. Also, as to both bills, Commissioner Farrell is in doubt about the wisdom and desirability of emphasizing good credit as a guide in the fixing of just and reasonable rates. When the commission last year recommended to the Senate committee legislation similar to that embodied in H.R. 7116, he said, there were commissioners who were opposed to the rate base formula. In its annual report the commission had also said that the rate base proposal was likely to provoke considerable controversy and that if Congress should decide to retain the fair value provision as it now stands, that could be done without abandoning the other changes it had recommended.

The bill which Commissioner Eastman said now seems preferable to the majority provides that the commission shall, after giving due consideration, among other things, to the transportation needs of the country, to the necessity for sufficient credit for the carriers and for transportation service at the lowest rates consistent with adequate service, "so far as practicable, initiate, modify, establish, or adjust rates so that the revenues derived therefrom will, under honest, efficient, and economical management and reasonable expenditures for maintenance of way, structures, and equipment, constitute a sufficient basis for the maintenance of a national system of railway transportation at all times adequate to the needs of the public."

Chairman Rayburn announced that the committee proposes to hold hearings on four days a week and to go thoroughly into the subject, with a view to rewriting the bills in executive session. It also proposes to take up most of the nineteen recommendations made by the commission in its annual report. Commissioner Eastman was to be followed by representatives of the shippers and of the railroads.

Adequate Transportation the Standard

"In addition to giving the commission authority to prescribe just and reasonable rates, subject always to Constitutional limitations", Commissioner Eastman said, "all that we believe that Congress can wisely and effectively do is to make it very clear in the law that in regulating the general level of rates the commission shall always keep in mind and be guided in its action by the necessity of producing, so far as possible, revenues which will afford over a reasonable period of years a sufficient basis for the maintenance of a national system of railway transportation at all times adequate to the needs of the public; and at the same time make it clear that the rise of revenues with increasing traffic in times of prosperity or their fall with decreasing traffic in times of depression shall not necessarily be regarded as a reason for reducing or increasing rates, as the case may be. It is very important that the latter principle should be embodied in the law. So long as the railroads are entrusted to private ownership, there can be no dispute as to the fact that in the long run they cannot function successfully and to public satisfaction unless they enjoy earnings which will maintain their credit and attract private capital to the industry. And if they do enjoy such earnings and private capital is attracted, that is the best possible proof that these private agencies are being compensated adequately for the performance of this public service."

He described the two bills as differing "in the fact that H.R. 7116 provides for what may be called a barometer of earnings by which the commission is to be guided, although in no inflexible way. That barometer consists in net railway operating income equal to a fair return, as defined in the bill, upon an aggregate rate base. It differs from the standard now set in Section 15a only in the fact that this aggregate rate base is substituted for aggregate value for rate-making

purposes, in the fact that what shall constitute a fair return is more specifically defined, and in the further fact that the commission is given more leeway in following this guide. No such barometer of earnings is contained in the shorter bill, H.R. 7117. That formula was introduced in the bill as a barometer of earnings, I may say, solely because it was felt that, due to possible distrust of the commission, investors might feel better safeguarded if a definite standard should be set up as a guide, even if there were no obligation to follow it implicitly. The country could then watch the progress of earnings and note their deviations up or down from the standard so provided, and bring the force of public opinion to bear upon the commission in legitimate and appropriate ways if it was felt that the commission was erring in its action. It was also believed that the rate base formula recommended provided a fair and reasonable standard. If it is thought that no such standard or barometer of earnings is needed, there is no reason why the commission should object to its omission." Commissioner Eastman had earlier said that 15a was not proposed by the commission or by the railroads or by the shippers, but had originated with an association of security owners, and that the opinion of the commission upon it had not been sought by Congress at the time it was passed.

Present Rule Called Uneconomic

In opening his statement Commissioner Eastman said that the fair return proposed by 15a is "quite a different thing from the fair return of which the Supreme Court has held that a public service company cannot under the Constitution lawfully be deprived", because the latter applies to individual companies while section 15a applies to an average for all the railroads in the country or any designated rate group. There are few industries, he said, which are able, even in good times, to earn 5.75 per cent in their entirety, and this average may therefore properly be made lower than might be fixed for an individual company. Section 15a, he said, is a unique provision in public regulation in this country, and he pointed out that when the transportation act was under consideration the House committee had stated its opposition to it in words which were "prophetic," questioning the ability of the commission, to so fix the level of rates as to produce any given percentage, because of the many occasions for fluctuations in revenues.

He also said that Jerome J. Hanauer, of Kuhn, Loeb & Co., is entitled to be included among the prophets because in testifying before the commission in 1922 he had said that in enacting the law Congress had "omitted to provide that the shippers of the country should furnish the traffic necessary to make the law effective," and that the mandatory provisions of the act "violate economic laws." He quoted Mr. Hanauer as saying he would be in accord with the repeal of Section 15a if it was made clear to the public that it was repealed as fundamentally uneconomic rather than because the percentage was considered excessive.

Commissioner Eastman outlined the lengthy procedure necessary to obtain valuations for 959 operating railways for each year and the great burden this placed on the commission's forces, and pointed out that after the Supreme Court had decided adversely to the commission in the test case involving the O'Fallon it had not clarified the principles of valuation by indicating the weight to be given to cost of reproduction or any other element. The next test case, he said, that involving the Richmond, Fredericksburg & Potomac, is headed for the courts.

"It seems clear," he said, "that those who were responsible for Section 15a believed that the regulation of the general level of rates could be reduced practically to a formula, and that they could be moved up or down so as to result in substantially a uniform average level of earnings. It is also clear from its 1919 report that this committee did not then believe that this theory was sound." He then outlined the history of the principal rate changes since 1920, saying that the results following the general reduction in 1922 "appeared to vindicate the judgement of the commission" and that up to the end of 1929 the financial condition of the railroads was in general regarded as favorable. "While the average return throughout the country never reached the stipulated figure, conditions were in general sufficiently favorable and prospects for the future appeared sufficiently good, so that there seemed to the commission, and except in western territory to the carriers, no adequate reason for subjecting industry to the disturbance which an increase in the general freight rate level would entail."

Calculations Disturbed by Loss of Passenger Traffic

"There were, however, factors operating adversely and upsetting in unforeseen ways calculations as to earnings. The most important of these was the continual falling off of passenger traffic. This is well illustrated by figures introduced by Professor Cunningham of Harvard University in a case now pending before the commission. He estimates that in the five years, 1921-1925, the freight traffic of railroads in the Eastern district earned 4.994 per cent on our tentative valuation, and their passenger traffic 2.690 per cent. In the five years, 1926-1930, the corresponding earnings were 6.678 per cent for freight and 0.778 per cent for passenger. In the Southern district the earnings in the first period were 6.157 per cent for freight and 1.828 per cent for passenger, whereas in the second period they were 7.038 per cent and a deficit of 2.787 per cent, respectively. Other factors from time to time affecting earnings adversely were floods, droughts, and crop failures from various causes, and the rapid development of competing transportation agencies, such as motor trucks, pipe lines, and barge lines. Of course when the present depression brought in its wake a tremendous shrinkage of traffic, railroad earnings went to pieces.

"I have gone over this history, not by way of apology for the commission, but merely to show the great practical difficulties in attempting to maintain, even approximately, a constant level of railroad net earnings, regardless of changes of one sort or another in economic conditions. We believe, as this committee did in 1919, that it is impracticable to do this. That being so, we further believe that it is unwise and undesirable to continue provisions of law which create the impression that railroad net earnings can and will be brought up to a certain standard in periods when traffic is light for one reason or another, and that they should and will be brought down to that standard when conditions are favorable and traffic is heavy.

Mr. Eastman also contended that the fair value rule is so difficult to apply and so unstable in its results that the end which the Supreme Court has sought to achieve through this rule can be attained in a simpler and better way through combination of the rate base and the percentage as factors to be considered.

Rate Base Called Favorable Under Present Conditions

"As a matter of fact," he said "this base is probably now more favorable to many companies than would be a value arrived at by taking present reproduction costs

and land values and deducting the full amount of depreciation. If it is not more favorable now, the indications are strong that the time is not far distant when it will be more favorable. If one desired to make things uncomfortable for the railroads, the plain course to pursue for some time to come would be to argue for a value of their property giving the same controlling weight to current reproduction costs as they have consistently urged since the passage of the valuation act in 1913. In the past I did not think that was fair to the public, and for the future I do not think that it would be fair to the railroads.

"Having ascertained this relatively stable rate base we arrive at the end sought by the court through our definition of a fair return, which is designed to achieve the very result set forth by the court. That is the sum and substance of the rate base formula, and there is nothing radical or revolutionary or unfair about it. It could, indeed, be criticized as being too favorable to the railroads under present conditions. We believe that if this plan were made clear to the Supreme Court, and particularly the coincidence between the end which it seeks to achieve and the end which the court has plainly had in mind, it would not be found to be violative of the Constitution. And we believe that this would even more certainly be the result if it came to the court as the direct expression of the well-considered thought of the legislative branch of the government. In saying this, I should add that I speak for the majority of the commission. There are some who do not approve the rate base plan, as was made clear in our report of last year to the Senate committee."

Mr. Eastman also pointed out that Section 2 of both bills would repeal subdivision (b) of paragraph (6) of Section 5 of the interstate commerce act, which limit the capitalization of the consolidating company to the value of the consolidated properties, and requires the commission to proceed immediately, in the event of an application for consolidation, to ascertain such values under section 19a. In many instances, he said the growing use of stock without par value renders subdivision (b), in its present form, practically inoperative. And where this difficulty does not arise, other difficulties, almost as great, exist, for the provision relates to the entire properties of the carriers in question, and most railroad companies own considerable non-carrier property. The commission believes this to be an effective obstacle to the consummation of actual consolidations, as contrasted with mere acquisitions of control, and that it can safely be eliminated.

He also urged the importance of Section 3 of both bills which changes the present paragraph (f) of section 19a, so that it will no longer require the basic valuations to be brought up to date "in like manner" from time to time. Instead it will require merely that the commission shall keep itself informed of all changes in the condition, quantity, use and classification of the property of the carriers, and of the cost of all additions and betterments thereto and of all changes in the investment therein, in order that it may have available at all times the information needed to enable it to revise and correct its previous inventories and classifications.

Complete Repeal of Recapture Urged

The commission is unanimously of the opinion that the recapture provisions should be repealed *in toto*, not only for the future but retroactively from the very beginning, Commissioner Eastman said, adding that repeal for the future is not of much present importance, for there is likely to be little, if anything, to recapture for some time to come, but that retroactive repeal covering the past is of very great importance. "To the extent that we find amounts of any considerable size due in the proceedings now pending," he said, "there are few, if any, railroads which have cash enough on hand to pay them, and still fewer which could do so without robbing Peter to pay Paul. There are better uses to which the slender railroad credit, so far as it is available, can be put than to raise cash to pay to the government excess income of the past which in most cases is more than balanced by the income deficiencies of the present."

It is possible to make only a rough estimate, to which it would be a mistake to attach much weight, as to the amount due under the recapture provisions, Commissioner Eastman said, but such an estimate has been prepared, covering the period from 1920 to 1930, inclusive, making a total of $378,398,194. Of this $224,543,-398 is included in the present recapture program, covering 296 cases, embracing in general the period from 1920 to 1927, and, he said, is probably a more nearly accurate estimate than the remainder.

He pointed out that these estimates show nothing due from such roads as the Pennsylvania, the Burlington, the Northern Pacific, the Illinois Central, the Chicago & North Western, the Milwaukee, the Missouri Pacific, the Lehigh Valley, the Erie, the Rock Island, and other important roads which might be named. On the other hand, they show amounts due from the four large roads which have recently gone into receivers' hands, namely, the Florida East Coast, the Seaboard Air Line, the Wabash, and the Ann Arbor. The amount shown as due from the Seaboard Air Line is materially greater than the amount shown as due from the Louisville & Nashville. A comparatively large amount is shown as due from the Frisco, and also from the Nickel Plate. "There facts merely go to show that some roads are financially strong because of their conservative capitalization in comparison with valuation," he said, "whereas others are weak because of overcapitalization." A great number of small roads are included in the list, many of which are controlled by industries. From the standpoint of logical theory there is much to be said for these provisions, Commissioner Eastman said. "The objections to them are practical rather than theoretical. For the moment practically all the railroads are financially weak, and nobody knows how long this condition will continue. It is probable that the revival of their credit will lag very considerably behind the revival of business conditions. While I believe that their traffic and earnings will ultimately be restored, they have a hard struggle ahead, not only with business conditions but also with competing forms of transportation.

"Railroads are exceedingly sensitive to the changing industrial conditions in the territory in which they operate. Consequently they are likely to have severe fluctuations in earnings. The present depression has hurt all the railroads terrifically. These fluctuations were foreseen by this committee in 1919, but it is doubtful whether they were foreseen by those who conceived section 15a and the recapture provisions. The periods governing recapture are very short—only 12 months. They do not permit these fluctuations to be averaged. A road may have one fat year followed by several lean years. Under the present law the lean cannot compensate for the fat. In the case of some little roads we are actually in the situation of having a recapture claim against a carrier which is about to be abandoned and sold for junk.

"Not only that but although the recapture plan was designed to take from the strong for the benefit of the weak, it does not by any means always operate that

way. Some railroads are strong because they are undercapitalized or have valuable resources apart from their railway property. Others are weak because they are overcapitalized or have outside investments which are a drain upon them; and those which are in this latter condition make as great a show of earnings as possible, sometimes to the detriment of the property.

"To my mind one of the most important practical objections to valuation is the endless litigation to which it leads. As a matter of fact it cannot be said with certainty that when these cases get into court, as many of them will, we shall not have to try out the valuation facts as well as the law all over again before the court or possibly before a jury. Such continual litigation is undesirable and unwholesome from many points of view. Personally I dread to think of the important principles of public regulation which will be involved being determined in cases where the primary issue will be whether money shall be taken from a company which can perhaps ill afford to give it up.

"Summing up the situation, we are of the opinion that the difficulties, disadvantages and dangers of recapture far outweight its possible advantages. This being our conclusion, we see no escape from the conclusion that the present recapture proceedings should be discontinued and the money returned which is now in the contingent fund. This money cannot in fairness be retained unless we are prepared to go ahead with recapture and treat all roads alike.

"Nor do I feel clear that even in theory recapture of excess income is sound procedure. There is something incongruous in a system of regulation which finds it necessary to permit carriers to earn more than they ought to earn, and meets the difficulty by taking money away after it is received."

Appearing before the committee again on the following day to answer questions, Commissioner Eastman said that of the total estimated recapture liability, 26½ per cent represented by that of the Chesapeake & Ohio, the Hocking Valley, the Norfolk & Western and the Virginian, while 15½ per cent was that of the roads controlled by the United States Steel Corporation, and that these two groups represented 42 per cent of the total. The number of other industrial roads included in the list, he said, also gave some indication of a tendency to give generous divisions to industrial roads.

He also pointed out that the net capitalization of the railroads, $19,055,626,085 in 1930, is materially lower than the commission's valuation figures on any basis or the property investment of the railroads, and that such a basis would therefore be more favorable to the public than the value basis. He gave valuation figures on various bases, including one of $25,359,264,331 representing the cost of reproduction less depreciation at 1931 prices, including present value of land, but said that there has been a tendency for reproduction costs to come down closer to original cost.

Although Commissioner Eastman said that the proposed substitutes for Section 15a are directed toward improving the method rather than toward lowering the standard, he also cited some figures indicating a belief that 5¾ per cent may be too high a standard, which he said had been compiled by a reliable statistician. He said the fact that the railroads had had good credit during the years from 1922 to 1929, although they had never attained the 5¾ per cent standard, "gave cause for reflection" and that this statistician had calculated that 5¾ per cent on the undepreciated book value of the railroads, their "utmost claim in a rate case," in 1929 would have allowed 14.89 per cent for the common stock, after payment of all fixed charges and preferred dividends and after allowing ½ per cent for surplus, while 4¾ per cent would have allowed 10.94 per cent for the common stock. On the basis of valuation used in the O'Fallon case the return for the stock would have been 10.42 per cent on the 5¾ per cent basis and 7.25 per cent on a 4¾ per cent basis.

Asked if the recapturable earnings indicate that the shippers paid too high rates, or that the commission would have prescribed lower rates if there had been no recapture in the law, Mr. Eastman said that it has been held by the Supreme Court that it does not follow that the shippers paid too much and that while it is possible only to speculate as to what the commission might have done it is probable that the commission would have had to proceed along similar lines if there had been no Section 15a.

Asked by Representative Huddleston for a simple definition of a "reasonable rate" Mr. Eastman said it requires the consideration of many factors, just as the Supreme Court's valuation rule does, but that he thought that under conditions of normal traffic it would include the factor of fair return, although not under conditions of abnormally low traffic. He pointed out that no one is proposing to increase passenger fares although the passenger business is unprofitable.

In discussing the possible distribution of the recapture fund Commissioner Eastman pointed out that there might be some depreciation in it because it is invested in government bonds that are selling below par.

Mr. Eastman was to be followed by R. C. Fulbright, chairman of the legislative committee of the National Industrial Traffic League, which for several years has been advocating a substitute for Section 15a along the lines of H. R. 7117.

Road Develops Data on Z. M. A. Treatment

After five years' experience with wood treated with zinc meta-arsenite, during which time 1,120,501 cu. ft. of material impregnated with this preservative has been put to various uses on its lines, the Chicago, Burlington & Quincy has developed some pertinent service information concerning material so treated. As a practical result of observations made, Z. M. A. treatment is now standard on the Burlington for telegraph poles, crossing plank and the top or wearing course of roadway planking for highway bridges.

Among more important applications of this preservative, some 16,408 crossties, embracing three different species of wood, have been installed in test sections where their behavior is being watched, not only for resistance to decay, but particularly for possible corrosion of spikes and the dielectric characteristics of the wood from the standpoint of the effect on track circuits. In addition, two overhead highway bridges constructed entirely of timber subjected to this treatment were built last year, while there are also a number of installations of switch ties, piling and miscellaneous applications of lumber for other purposes. Detailed figures covering the use of material treated with Z. M. A. during the last five years are given in the table.

The characteristics and properties of this preservative, which were described in the *Railway Age* for

January 28, 1928, page 242, are briefly those of a salt that is not water soluble.

Data from Recent Inspections

While it is realized that accelerated tests of any preservative are not universally accepted as conclusive proof that the demonstrated toxic properties will insure the desired longevity of wood impregnated with it, no material treated with Z. M. A. by this railroad affords indications as yet of any discrepancy between the accelerated tests and the field tests that are being observed. Thus, in a recent inspection, 174 pieces of 6-in. by 6-in. by 8-ft. timbers and 270 pieces of 2-in. by 8-in. by 16-ft. planks installed as guards in the Ohio Street viaduct at Aurora, Ill., in 1928, were found to be entirely free from decay. Similarly, Southern pine poles placed in telegraph lines on the La Crosse division in the same year showed no indication of decay, although some of them were checked. However, the checking noted was not as severe as that ordinarily occurring in cedar poles, while it is believed that if decay were to occur in these poles there would be some indications of decay at this time.

Cubic Feet of Material Treated with Zinc Meta-Arsenite

	1928	1929	1930	1931	Total
Piling		6,542	1,121	9,886	17,549
Poles	257,293	212,584	272,568	239,194	981,639
Fir Lumber	1,713	12,723	14,967	8,305	37,708
Track Ties*	41,232	2,789		6,464	50,485
Switch Ties		274	579	9,126	9,979
Nailing Strips		9,593	1,792		11,385
Gum Crossing Plank			1,960	1,360	3,320
Maple Lumber			3,482	2,788	6,270
Oak Plank			1,229		1,229
Oak Lumber				937	937
					1,120,501

* In 1930, 23,314 cu. ft. of track ties were treated with Z. M. A. and petroleum oil mixture.

Southern pine piling treated with this preservative were driven in the Mississippi river at Quincy, Ill., to serve as part of a draw-span protection, and a recent inspection likewise disclosed no decay. For service of this kind where the piles are submerged or partly submerged the road insists that the wood be thoroughly air-seasoned after treatment to insure the complete evaporation of the acetic acid in the preservative, and thereby protect against the leaching out of appreciable amounts of the toxic salts.

Study Crosstie Installations

The installations of Z. M. A. treated ties are two in number, one on the Aurora division at Lisle, Ill., namely, 1,894 of pine, 1,753 of oak and 1,945 of gum, and the other on the La Crosse division, embracing 4,936 gum ties, 3,024 oak ties and 2,856 pine ties. As the former group was inserted in 1930 whereas the latter were placed in track in 1928 and embrace a larger number of pieces, comment will be confined to the ties in track on the La Crosse division. These ties are also of particular interest because they were the subject of a test for electrical resistance, conducted by W. F. Zane, signal engineer. A thorough inspection of these ties made last fall in the course of which many increment borings were taken, disclosed no evidence of decay. Likewise, a considerable number of spikes removed from these ties indicated a rate of corrosion for three years' service that was no greater than that ordinarily observed in spikes driven in other ties for the same service period. Data on the relative electrical resistance of ties treated with this preservative are given in the following abstract of a report prepared by Mr. Zane.

The ties were installed in November, 1928, in new second track, thus permitting them to be distributed so that ties of only one type of timber were used throughout each track circuit. The track was constructed with 100-lb. A. R. A. Type-A rail, the ties being spaced 22 to the rail, and fully tie-plated with 7½-in. by 10-in. plates. The ties are in cinder ballast which is dressed so that it is flush with the top of the ties at the track centers and clears each rail one inch.

Tests for Electrical Resistance

At the time the test was started, a chemical analysis was made of the cinder ballast, which was found to be typical of railroad cinders that are not in contact with ties that have been treated with soluble acids or chlorides. The analysis of the ballast showed a faint trace of zinc, but this was not due to leaching of the preservative from the ties as the test for arsenic was negative.

The test section includes eight track circuits with Z. M. A. treated ties and five track circuits with ties treated with the Card process (zinc chloride and creosote oil). These circuits range from 1,980 ft. to 2,470 ft. in length, and the test was started in August, 1929, when the track was placed in service.

Each of the track circuits under test is fed from a seven-plate lead-acid storage battery, which is on a-c. floating charge, through a rectifier operating from a 220-volt, 60-cycle, single-phase power line. Four-ohm track relays are used and each relay is equipped with four front and two back contacts. Each rail joint is bonded with two Copperweld bond wires bonded into the web of the rail with duplex channel pins. The insulated joints are of the continuous type for 100-lb. rail. All of the equipment required for these track circuits was installed new according to the railways' standards.

The current flow to these track circuits has been constant most of the time; the few fluctuations that have been noted were due to the application of additional ballast from time to time to take care of settlement occurring in the new fill. As this new ballast was allowed to lie in contact with the rail before the surfacing was done, this condition has at times produced a ballast leakage which was due to rail contact rather than to tie contact.

Table Showing Comparative Costs of Track Circuit Operation

Track Circuit	Treatment	Kind of Wood	Current from Battery	Watts Consumed	Cost Per Year for Current for Track Circuit
A	Z.M.A.	Oak	.280 Amp.	7.00	$3.68
B	Z.M.A.	Oak	.220 Amp.	5.5	2.89
C	Z.M.A.	Gum	.290 Amp.	7.25	3.81
D	Z.M.A.	Gum	.280 Amp.	7.00	3.68
E	Z.M.A.	Gum	.200 Amp.	5.00	2.62
F	Z.M.A.	Gum	.210 Amp.	5.75	2.76
G	Z.M.A.	Pine	.230 Amp.	5.75	3.02
H	Z.M.A.	Pine	.440 Amp.	11.00	5.78
*I	Z.C.	Oak	.600 Amp.	15.00	7.88
*J	Z.C.	Oak	.530 Amp.	13.25	6.96
*K	Z.C.	Oak	.525 Amp.	13.13	6.90
*L	Z.C.	Oak	.500 Amp.	12.50	6.57
*M	Z.C.	Oak	.400 Amp.	10.00	5.25

* These sections are track circuits with ties treated by the Card Process using zinc chloride and creosote oil. The ties were treated at the same time and installed at the same time as the Z.M.A. treated ties.

Track readings of circuits where Card process-treated ties are in service, showed a very erratic performance during wet weather. Under normal dry conditions, the ballast resistance for the track circuits where the ties were treated with Z. M. A. averaged 9 to 10 ohms, as compared with 3.5 to 6 ohms for the track circuits where the ties were treated by the Card process. In wet weather the ballast resistance for the Z. M. A.

sections was 2 to 3.5 ohms, as compared with 0.5 to 1 ohm for the Card tie sections.

These tests were conducted to determine the relative economy of the two types of treatment, in so far as track-circuit operation is concerned. The results, as shown in the table, are based on the actual power consumption with the track circuit unoccupied, and an allowance of 20 per cent is made for losses in the transformer, rectifier and line.

Thus, in the last column of the table it will be seen that the cost per year for current consumption by the track circuits ranged from $2.62 to $5.78 in track laid with Z. M. A. ties and from $5.25 to $7.88 in track laid with Card ties. Comparing the five Z. M. A. circuits showing the greatest current drain with the five Card tie circuits, the saving in favor of the former was $13.59 per year. On the basis of the five Z. M. A. circuits showing the least current drain, however, the saving was $18.59.

This timber has been treated under the supervision of H. R. Duncan, superintendent timber preservation, Chicago, Burlington & Quincy, to whom the *Railway Age* is indebted for the above information.

New Milwaukee Locomotives Notable for Refinements in Design

(Continued from page 155)

off cocks, sludge remover and muffler are employed, the combination muffler and separator being mounted on the boiler just in front of the cab turret and operated by air. The blow-off water is separated from steam and is drained between the rails, the steam rising to the atmosphere. By this means, the noise, when blowing off, is considerably reduced, and blowing off can be accomplished anywhere, even under a train shed.

As shown in the illustrations, the Baker valve gear is employed. The guides are of the Alco slide-guide type, lubricated from the Nathan force-feed lubricator. The Hoofer flange lubricator is installed, with outlet connections to the flanges of the front drivers. The main drivers are reinforced by additional webbing between the spokes to protect against the possibility of failure.

A Prime bell ringer is employed, which allows the bell to remain stationary, a small reciprocating piston moving the clapper against the bell, and being adjustable to any beat desired, from a rapid one to as slow as occurs with the ordinary swinging bell. The bell can also be swung in the usual manner should any trouble occur with the power ringer. The locomotive whistle, located on the left side of the smoke box, is blown by an air-operated whistle blower, furnished by the National Safety Devices Company. A Weston electric speed indicator is mounted on the right front engine-truck box, with the indicating dial located in the cab in direct line with the vision of the engineman. It is calibrated for 30 m.p.h. backing up and 90 m.p.h. ahead.

The last four F6-a locomotives, equipped with the Cyclone spark arresters, have netting guards at the ash pan flare to prevent the cross draft from blowing sparks out of the ash pan. The Locomotive Water Conditioner equipment on all eight locomotives includes the Wilson centrifugal pump, 6-in. Kiel metallic joints in the exhaust steam line between the locomotive and the tender, and special temperature-regulating valves. Air and steam heat connections between the locomotive and the tender are of the Barco type. Automatic train stop equipment is furnished by the Union Switch & Signal Co. The Duco system of painting is used on the cab, tender and jacket above the running boards. As a protection against deterioration from rust, the interior surfaces of the tender tank and air reservoirs are coated with No-oxide, which is also applied to all locomotive and tender springs to prevent corrosion and assure smooth working springs.

Freight Car Loading

WASHINGTON, D. C.

THE first report of revenue freight car loading for a full week in the New Year, that ended January 9, began the year with a total of 572,504 cars, a decrease of 140,624 cars, or 19.5 per cent, under the total for the corresponding week of 1931 and of 189,957 cars under that for the corresponding week of 1930. Increases were reported as to all classes of commodities as compared with the preceding week, which included a holiday, but there were reductions in all classes and in all districts as compared with last year. The summary, as compiled by the Car Service Division of the American Railway Association, follows:

Revenue Freight Car Loading

Week ended Saturday, January 9, 1932

Districts	1932	1931	1930
Eastern	130,434	155,255	191,664
Allegheny	112,471	142,617	173,824
Pocahontas	35,852	44,930	59,203
Southern	88,200	111,739	136,616
Northwestern	65,422	86,073	102,970
Central Western	90,120	113,239	127,467
Southwestern	50,005	59,275	70,717
Total Western Districts	205,547	258,587	301,154
Total All Roads	572,504	713,128	862,461
Commodities			
Grain and Grain Products	27,510	39,520	39,506
Live Stock	24,579	27,171	29,703
Coal	125,927	164,866	196,756
Coke	6,005	8,915	10,695
Forest Products	16,831	29,975	49,307
Ore	3,194	5,167	9,120
Mdse. L.C.L.	183,469	202,384	227,835
Miscellaneous	184,989	235,130	299,539
January 9, 1932	572,504	713,128	862,461
January 2, 1932	503,325	614,860	775,755
December 26, 1931	......	441,589	536,292
December 19, 1931	......	581,733	713,865
Decemebr 12, 1931	......	613,534	744,353

The freight car surplus for the last week in December was the largest ever reported, amounting to 750,696 cars, an increase of 51,125 cars as compared with the preceding week. This included 401,332 box cars, 268,669 coal cars, 33,409 stock cars, and 15,846 refrigerator cars.

Car Loading in Canada

Revenue car loadings in Canada for the week ended January 9, which, as explained in the last report, is being considered as the first week in 1932, amounted to 38,784 cars. This was an increase of 8,063 cars over the previous week and of 2,435 cars over the first week in 1931. The comparisons with the previous week's loadings show increases for all commodity classes but these increases were seasonal.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada		
January 9, 1932	38,784	19,481
January 2, 1932	30,721	16,989
December 26, 1931	31,258	18,217
January 3, 1931	36,349	21,783
Cumulative Totals for Canada		
January 9, 1932	38,784	19,481
January 3, 1931	36,349	21,783
January 4, 1930	44,503	31,198

Trading Purchases for Traffic

I. C. C. urged to recommend corrective legislation to curb a harmful practice

WASHINGTON, D. C.

RECOMMENDATIONS by the Interstate Commerce Commission for legislation rescinding the right of shippers to route their freight and giving the commission authority to require that railroad purchases shall be made on competitive bidding are suggested in a proposed report by William P. Bartel, director of the commission's Bureau of Service, and Examiner John L. Rogers, on the investigation instituted by the commission into the matter of reciprocity in purchasing and routing.

The report, made public January 20, includes a comprehensive review of the evidence brought out in the preliminary investigations by representatives of the commission and in the succeeding hearings held in several of the principal cities, which have been reported from time to time in the *Railway Age*. From this the conclusion is reached that "some corrective action should be taken to curb a harmful practice which is already steadily growing." The report says that although it is possible, it does not appear probable that the carriers can be relied upon to correct the abuses disclosed by the investigation and that additional legislation will be necessary, although the belief is expressed that they "silently hope that some action will be taken to relieve them of the pressure exerted by large shippers." The full text of the conclusions which will be made the subject of argument before the commission, follows:

Conclusions

While numerous witnesses stated that the practice of reciprocity in purchasing and routing is not new it is clear from the record that never before have traffic considerations assumed such an important place as is true at present. And when we say that this is clear from the record we are mindful of the fact, which is equally clear, that the record does not fully and adequately show the extent to which traffic does influence purchases. The information of record was obtained largely from the carriers' records. Notwithstanding, extended examination of witnesses with the carriers' records as a basis little information was elicited other than that contained in the documents. In practically no instance did carriers' counsel make any inquiry or assist in any way in developing the facts. The result is that we were handicapped in developing the facts because of the difficulty in obtaining information as to private conversations and oral agreements as to purchases and traffic.

As is well known, the practice of trading purchases for traffic has been the subject of numerous press articles and privately made comments urging that some action should be taken to curb the practice in the interest of the carriers and the public. After conference with the authors of several of these criticisms it became apparent that they were not willing to assist in developing all of the facts or to disclose the information upon which their comments and opinions were predicated.

While the information we have is not complete we believe that the carriers generally, and especially their purchasing and operating departments, silently hope that some action will be taken to relieve them of the pressure which is exerted by large shippers who also have something to sell to the railroads. We are convinced that the reason the carriers' witnesses did not voice such sentiment and give supporting reasons, was that each carrier was afraid that if such testimony was given on its behalf that its competitors would remain silent and that the shippers involved would divert traffic from the carrier whose representatives gave the testimony.

It must be obvious that the pressure which a shipper can exert in obtaining purchases depends upon the volume of the traffic which it controls, and likewise the extent of the pressure which a carrier can exert in obtaining traffic depends upon the volume of its purchases. The manufacturer of railway materials or supplies who has little traffic to offer as an inducement is at a serious disadvantage although its product may be superior and its prices comparable. The smaller carriers with limited purchasing power are likewise at a disadvantage in securing traffic although their services are prompt and efficient, and their rates on a parity with those of their larger competitors.

Operating Expenses Unnecessarily Increased

It is said that reciprocity in purchasing and routing is comparable with similar practices engaged in by practically all forms of business enterprises. But the carriers are performing a public function and the public through charges assessed must pay the bills. Any practice which unnecessarily increases the operating expenses of the carriers as a whole must ultimately cause an increased and unnecessary burden upon the public. All of the reciprocity that is now practiced between the carriers and manufacturers and dealers does not add any traffic to the total to be transported but merely results in shifting it from one carrier or concern to another. Likewise the total purchases of the carriers are not increased. For every diversion and gain by one carrier or concern there is a corresponding and frequently a more important loss to other carriers or concerns. We say a more important loss because under this practice there is a natural tendency for the traffic and purchases to be diverted from the smaller and weaker carriers and concerns who are often least able to stand the loss.

There is no doubt in our minds but that if the purchasing departments of the carriers were uniformly left free to contract for needed materials and supplies without interference from the traffic departments of the carriers the result would be decreased operating expenses through the purchase of better quality at lower prices.

If the true results of the present practice could be brought to light we believe the amount of unnecessary expense incurred thereby would be surprising. In this connection it is not to be overlooked that much of the expense incurred by the traffic departments, which is in part incurred by reason of reciprocal practices under consideration here, benefits the public little if any, yet the public must bear the expense thereof through the charges which it pays. The whole subject of traffic expenses is now being studied as a part of Docket Ex Parte No. 104.

Shippers' Right Being Abused

Under the provisions of the Interstate Commerce Act shippers have the right to specify the route over which their shipments shall be transported. There is no reason which is apparent to us why it is of any great importance to shippers from the standpoint of transportation that they be able to specify the route which their shipments shall take in reaching destination. On the other hand, this right bestowed by the law is being abused and used as a weapon to force purchases from the carriers and is being very effectively employed.

Under the Clayton Act the carriers under specified circumstances must purchase supplies or other articles from the bidder whose bid is the most favorable, to be ascertained by competitive bidding under regulations to be prescribed by the Commission. This provision is applicable only where the purchases "amount to more than $50,000, in the aggregate, in any one year, with another corporation, firm, partnership or association when the carrier shall have upon its board of directors or as its president, manager or as its purchasing or selling officer, or agent in the particular transaction, any person who is at the same time a director, manager, or purchasing or selling officer of, or who has any substantial interest in such other

corporation, firm, partnership or association" ***. In other circumstances the carriers are not required to purchase their supplies and materials as a result of competitive bidding, and in cases where competitive bids are requested the bids need not be opened in public or necessarily followed to the extent of awarding the purchase to the most favorable bidder.

Although it is possible it does not appear probable that the carriers can be relied upon to correct the abuses disclosed by this investigation. Some corrective action should, however, be taken to curb a harmful practice which is already steadily growing. It appears that additional legislation will be necessary in order that this practice may be reached for corrective action. It is our suggestion that the Commission recommend to the Congress that (1) the provisions of the law under which the right is given to shippers to specify the routes over which their shipments be transported be rescinded, and, (2) that authority be vested in the Commission to require by order that purchases of any or all materials, supplies, equipment, or other articles shall be made from the bidder whose bid is the most favorable to the carrier or carriers, to be ascertained by competitive bidding under regulations to be prescribed by rule or otherwise by the Commission.

The report points out that the importance of the investigation is obvious when it is considered that the annual purchases of fuel, materials, and supplies by the railroads probably exceed one and one-half billions of dollars, and constitute between 25 and 30 per cent of total operating expenses. In a review of the general practices of railroads in purchasing supplies it is stated that while bids are generally invited when the purchase of certain commodities and articles is contemplated "considerable explanation is necessary to an understanding" of the manner in which the awards are made, and that it is common practice to advise other bidders of the lowest bid and then to divide purchases proportionately among those who are willing to meet the low bid according to the commercial tonnage of respective bidders which has been or is to be routed over the lines of the purchasing carrier.

Although manufacturers and dealers have for many years insisted that the carriers recognize their patronage in awarding purchases, the report says that the practice has in the past few years become much more general. In theory, it states, the purchasing department before placing the name of a firm on the inquiry list investigates as to the general reliability of the firm and their ability to furnish material of acceptable quality and in the desired quantities, but in actual practice the insertion or withdrawal of a name from the inquiry list often depends upon whether or not the firm is of traffic value to the carrier. "After the bids are opened consideration is given to the traffic value of the bidders and if it is found that the low bidder is of little or no traffic value, or if the low bidder's traffic does not compare favorably with that of higher bidders, the usual practice is to notify or advise the higher bidders that their price is too high compared with others and permit them to revise their bids. Although it is generally denied that such higher bidders are advised how much too high they are, one cannot escape the conclusion from the evidence that this is frequently done. After the negotiations are at an end and the final bids are in, the purchases are usually split up between a number of the lowest bidders, the number of ways in which the purchase is split depending upon the volume, and the amount thereof which is awarded to respective bidders depending upon their traffic value as demonstrated by past shipments. There are exceptions to this general practice in the case of some carriers and as to some commodities, but in practically all cases the traffic matter is of considerable if not of controlling importance."

Following are some extracts from the comment made in the report:

It is not to be overlooked that practically all of the witnesses in this proceeding testified harmoniously that traffic was given consideration in awarding purchases only when "price, quality and service" are equal. And the witnesses who represented the traffic departments were consistent in their testimony to the effect that while they insist upon traffic being given consideration it is always understood that "price, quality and service" must be equal before their recommendations are applicable. It is to be noted, however, that in general the evidence of record covering correspondence between the traffic and purchasing departments discloses no such qualification in the attitude of the traffic departments as to what the purchasing departments should do in the way of making purchases from manufacturers and dealers according to their present or prospective traffic value. The correspondence of record between the traffic and purchasing departments is more conclusive than the verbal testimony and it is clear therefrom that if the policy is adhered to of insisting that price, quality and service be "equal" before considering traffic value it is because the officers of the purchasing departments have sufficient stamina and authority to adhere to the policy regardless of the expressed or implied insistence of the traffic department.

Pressure on Both Sides

We have previously referred to the insistence of manufacturers and dealers that carriers recognize their traffic value when making purchases. The practice is also followed in the opposite direction and is pursued by the carriers with like vigor. Copies of all orders placed by the purchasing department, or the equivalent, are usually sent to the traffic department. A summary is prepared each month showing the names of the various concerns from whom purchases have been made and the amounts thereof. These summaries are sent to the field representatives of the traffic department who use them in soliciting traffic and in securing tonnage on a reciprocal basis.

Sales managers and traffic representatives of the various manufacturers and dealers have with increasing force brought to the attention of the carriers' representatives the extent of their shipments in the hope of influencing purchases. In other words the shippers use their tonnage in soliciting purchases from the carriers and the carriers use their purchases in soliciting tonnage from shippers. Where the business is competitive the concern or carrier which can exert the greatest pressure usually gets it.

It is admitted that frequently the amount of traffic controlled is over-estimated, or, in other words, manufacturers and dealers seeking to influence purchases from their concerns promise more traffic than they can deliver to the carriers individually or collectively. The solicitors, particularly of purchases, frequently use the business which they have to offer as a means of securing purchases or routing from one carrier or shipper, and then approach others and again use as an inducement the same business.

Certain manufacturers and dealers, who are also large shippers, have advanced to the carriers the suggestion that in view of the routing of traffic which they control the carriers could afford to pay them a higher price for their commodities. In the case of most of the witnesses there was a general denial that a higher price has been or will be paid for materials or supplies in order to secure the commercial shipments of the seller. Two chief executives strongly advocated the payment of premiums if by so doing it would bring business to their rails.

It appears to be the view of some manufacturers and dealers that it is a sound business proposition for a carrier to pay a higher price than others pay for the same item, if thereby its traffic can be sufficiently increased so that the net revenue of the carrier is increased as a result of the transaction. This reasoning might hold true if a carrier could indulge in the practice while other competing carriers refrained. This cannot reasonably be expected. If the practice is followed by one carrier competing carriers will undoubtedly resort to the same practice. The obvious result would be to raise the price paid by the carriers for their materials and supplies without any increase in traffic because clearly the total volume of traffic is not increased by such practices. Likewise the total volume of the carriers' purchases is not increased.

A number of manufacturers and dealers in equipment materials and supplies used by the carriers are subsidiaries of other concerns which are large shippers. In other instances, concerns which have little traffic to offer the carriers, although dealing in railway materials and supplies, have connections in one way or another with other concerns which

do have the traffic, and the latter traffic is used to influence purchases by the carriers.

Diversion of Traffic

In some instances manufacturers and dealers have threatened to divert, and in some instances have diverted, their traffic from one carrier to another because the first carrier made purchases from other concerns. An important manufacturer of electrical equipment diverted business from an eastern carrier because the manufacturer was dissatisfied and somewhat hostile toward the carrier's policies and methods as carried out by the purchasing department. The manufacturer installed a fleet of motor trucks to handle his traffic to and from points in adjoining states. From the evidence of record there can be no doubt that in a large number of instances traffic is diverted from one carrier to another because purchases are not made from the concern controlling the routing of the traffic. It is also clearly shown that the routing of traffic is a very effective weapon in the hands of the salesman soliciting the carriers' business.

To show the practical application of such practices as were outlined generally the report gives illustrations of purchasing methods as applied to coal, lumber, ice, fuel oil and lubricants, draft gear, and rail and related parts, stating that the same general practices prevail with respect to practically all other commodities. It is also stated that the record and exhibits contain many instances where the influence of men high in national, state, and local politics was used with effect in connection with coal traffic and fuel purchases, and that "a noticeable tendency revealed by the exhibits is that of relatives of prominent shippers and industrialists engaging in the coal business, more often as brokers, and bringing pressure to bear to secure fuel orders." Another statement is that "all testimony and exhibits relating to the distribution of railway fuel orders clearly indicate that commercial coal traffic is the basic consideration in all transactions." The subject of railroad fuel is now being studied further as a part of the investigation instituted by the commission under docket Ex Parte No. 104.

"There is probably no better illustration of the influence upon purchases of traffic considerations," the report says, "than is afforded by consideration of draft gear purchases during the past few years. The record shows in some detail the difficulty experienced by the carriers in making any purchase of draft gears without incurring the displeasure of some manufacturer, such displeasure usually being expressed in terms of traffic which might have been or had been routed over the particular carrier's rails."

* * *

The Future of the Railways

(Continued from page 158)

1922; that refused a 5 per cent general increase to the western lines in 1926, that ordered a reduction in the rates on deciduous fruit under the Hoch-Smith resolution, that fixed distance class rates almost throughout the country, that ordered the reduction in grain rates regarding which the Supreme court recently rendered an adverse decision; and that these acts of the commission alone are more than sufficient fully to explain the constant failure of the railways since 1920 to earn the return assured them by law. When the subject has been considered in all its aspects, the conclusion is inevitable that the complete failure of the railways to earn a reasonable return during the last decade has been principally due to the commission's persistence in pursuing a policy of restricting rates, and thereby earnings, more than the conditions warranted.

What Must Be Done

In view of all the facts, it seems to me that what must be done to assure the future of the railways and thereby enable them to perform their essential function in promoting the economic welfare of the American public is not seriously debatable by those who can learn from experience. There must be a continuance of efforts by manufacturers to develop and improve equipment, materials and supplies, and by railway officers to effect ever practicable improvement and economy in service. There must be what Commissioner Eastman has described as "a greater degree of co-operation on the part of railroad managements which will reduce competitive wastes in service and thus lower costs materially, and also reduce timidity in dealing with various rates". There must be an application of comparable regulation to all carriers in order that there may be established equality of opportunity between them in competing for all traffic. But there must also be revolutionary changes made in our federal regulation of railways, because such regulation as has prevailed during the last decade would defeat all efforts to establish the necessary future earning capacity of the railways.

The time has come when railway officers and others closely identified in interest with the railroad industry should cease to participate in a conspiracy of silence regarding the commission and its policy, and should begin to say in public regarding it what they say in private. If the railroad industry cannot be prevented from being ruined and driven into government ownership excepting by frank criticism of the commission, as apparently it cannot be, then the danger of voicing such criticism has become much less than the danger of expressing it.

Railway investors, railway officers and employees and manufacturers of railway equipment and supplies have it within their power to create the public sentiment necessary to cause a great improvement in railway regulation, and, under improved regulation, to effect all the improvements in the physical plant and in the art of railroading essential to paying as high wages in the railroad industry as are paid in any other industry, and to providing the public with the best railroad service in the world at rates lower than those charged anywhere else in the world and lower than are now being charged in this country. In order to accomplish these results, however, they will have to co-operate better, work harder and also fight harder than they ever have in the past.

Motor Transport Section

Store-Door Service Curbs Freight Traffic Losses

Illinois Central experiment with pick-up and delivery service in Louisiana proves successful—Extended to other points to meet competitive conditions

THREE months after it had instituted free pick-up and delivery service for l.c.l. freight between two of its principal stations in Louisiana, the Illinois Central had halted completely what had been an alarming decline in l.c.l. freight traffic and had brought about an increase in this business, which continued steadily thereafter. Admittedly an experimental operation, the Louisiana service proved so successful that the company has since extended to several other parts of its system the through service from store-door to store-door, either with or without extra charge.

In establishing its original pick-up and delivery service, the Illinois Central followed the same procedure which has been most commonly adopted in the West. It organized a subsidiary, the Mississippi Valley Transportation Company, which is incorporated under the laws of Louisiana. This subsidiary handles freight under its own bills of lading. For operating facilities, it contracts with the railway for transportation service between terminals and with trucking companies for the pick-up and delivery service in terminals. Its contract with the Yazoo & Mississippi Valley, over which line the transportation company first established its service, calls for the payment by the transportation company to the railroad of 90 per cent of the gross revenues it receives for the transportation of freight. The transportation company also pays to the railroad 90 per cent of its net profits. Aside from its payments to the railway for transportation service and to the transfer companies for the pick-up and delivery work—paid for under contract at so much per 100 lb. of freight handled—the transportation company has no expenses of importance. The officers of the transportation companies are officers of the railway, and all clerical and supervisory work is done by railway employees. The transportation company utilizes approximately 800 sq. ft. of space in the freight houses at the principal terminals where it operates, and also has the use of such freight house equipment as it may require.

Service Desired by Shippers

After obtaining authority from the Louisiana Public Service Commission, operations of the Mississippi Valley Transportation Company were commenced on November 10, 1930. Its original purpose was to provide complete l.c.l. freight transportation service, with pick-up and delivery, between New Orleans, La., and Baton Rouge. There seemed to be a demand on the part of the shippers in these cities for such a through transportation service, and the occasion was a good one for the experiment to test out the value of co-ordinated rail-truck service.

For the pick-up and delivery service at New Orleans, the transportation company entered into a contract with the Crescent Forwarding & Transportation Co., the largest drayage firm in the city. A similar contract was made with the Harris Transfer Company at Baton Rouge for the terminal truck service in that city.

The store-door pick-up service was provided at the terminals at Baton Rouge and New Orleans only. No intermediate points were served. In the event that merchandise was consigned to some intermediate point from one of these cities, the pick-up would be made by one of the railway motor trucks but consignees at intermediate points were required to make arrangements themselves for its final delivery. Conversely, shipments originating in intermediate points were required to be delivered to the freight house for shipment, but the consignee at Baton Rouge or New Orleans would receive the benefit of the railroad store door delivery by truck.

In spite of the fact that the complete store-door pick-up and delivery service was available only at the two terminals, shippers responded so favorably that what had been a distressing decline in l.c.l. freight traffic between New Orleans and Baton Rouge was converted by February, 1931, into a gratifying increase in this business. In each month following during 1931, there was a substantial improvement in the l.c.l. traffic handled between these points, in comparison with the corresponding months of 1930.

Operating Arrangements

The operating arrangement in effect at New Orleans calls for collections by the trucks of the contractor during the day, the pick-up of merchandise at the doors of shippers being made as late as 5 o'clock in the afternoon. Freight secured by the pick-up trucks is assembled at the truck company's warehouse, from which it is taken in large truck-load lots to the railroad's freight depot for loading into freight cars. Moving by rail to Baton Rouge, a distance of 90 miles, the cars are unloaded and the individual shipments delivered to consignees by the trucks of the Baton Rouge contractor before noon and usually by 9 or 10 o'clock in the morning. The shipper

may arrange for a truck to pick up his freight by calling any one of three agencies—the transportation company, the drayman or the railway company.

L.c.l. freight traffic is handled under this arrangement at the regular rail rates, subject to the sixth class rate as a minimum, no additional charge being made for the pick-up and delivery service within the corporate limits of Baton Rouge and within a prescribed area in New Orleans. This area takes in the major portion of the industrial zone of the city. Special waybills and bills of lading are issued by the transportation company in the handling of its traffic. At first it was decided that the transportation company would not handle "shipper's order—notify" bills of lading. However, in response to a considerable demand, this feature was included in the program for the convenience of shippers. C.O.D. service is also furnished, for which charges range from 30 cents, when the amount collected is not over $5, to $3.25 when the collection is $1,000. For collections of more than $1,000, the charge is at the rate of $3.25 per thousand dollars.

Shippers Protected Against Loss

The Illinois Central felt that one of its principal advantages in meeting the competition of independent truck lines was its reputation for reliability in protecting shippers against loss through damage to merchandise in transit. Consequently, it was determined that all motor vehicles operating in the system's co-ordinated rail-truck service should carry full insurance coverage, including both public liability and property damage. The same willingness to accept full responsibility for loss and damage to shipments which is found on the railway applies also to its subsidiary transportation company.

Encouraged by the success of the experimental operation between New Orleans and Baton Rouge, the Illinois Central, in October, 1931, extended the pickup and delivery service to other Louisiana shippers. This extended service likewise was provided by the Mississippi Valley Transportation Company, whose operations were extended to include additional stations on the Yazoo & Mississippi Valley and stations on the main line of the Illinois Central between Ponchatoula and Kentwood, a distance of 34 miles. On the Yazoo & Mississippi Valley the stations at which the pick-up and delivery service was established were on the lines between Baton Rouge and Hammond, a distance of 45 miles; between Baton Rouge and Norwood, a distance of 35 miles; between Baton Rouge and Clinton, a distance of 32 miles; and between Slaughter and Laurel Hill, a distance of 31 miles. With these additional routes the operations of the Mississippi Valley Transportation Company covered 265 miles of railway lines in the vicinity of New Orleans. In the 29 additional towns where the store-door service was instituted, contracts were made by the transportation company with local draymen for the handling of freight by motor truck between the railway freight houses and industrial plants and places of business of the local merchants. In each instance the pick-up and delivery service is offered without extra charge within the corporate limits of the cities or towns. In the case of towns which are not incorporated, the contracts provide for the motor truck service without charge within a radius of two miles of the freight stations. There are still a few points on the Illinois Central lines in Louisiana, in the territory outlined, in which the pick-up and delivery service is not yet available owing to the fact that these towns are without suitable local drayage facilities, for the use of which the railroad might contract.

A further inducement offered to shippers at the time of the expansion of the service of the transportation company was the change in the tariff to allow the shipper a reduction in the freight rate of 5 cents per 100 lb. when he makes his own arrangements for the movement of his merchandise to the railway station, therefore avoiding the necessity of using the transportation company's pick-up facilities. This special provision does not apply, however, in the case of consignees.

Service Extended

With the experience gained through the operations of the Mississippi Valley Transportation Company, the Illinois Central has recently established store-door pick-up and delivery service at other points on its system. In these instances, the railway does not utilize a subsidiary company as a medium for providing the through transportation service from store-door to store-door, but itself contracts with local trucking companies for the pick-up and delivery service and issues its own bills of lading covering the complete movement. Service of this kind is now available between St. Louis, Mo., and Memphis, Tenn., a distance of 316 miles, and between Mississippi River stations from Cairo, Ill., southward, and all stations in the southwest, this last being under the pick-up and delivery tariff instituted by all the railway lines in the southwest. In this instance, no extra charge is made for the pick-up and delivery service when the shipments move up to 300 miles, but there is a nominal charge of 10 cents per 100 lb. for pick-up and delivery service on shipments moving more than 300 miles.

On October 30, 1931 co-ordinated rail-truck service was offered for package freight moving between Chicago and points on the Illinois Central as far south as Kankakee, Ill., a distance of 54 miles. In this instance, the charge for pick-up and delivery service at Kankakee and intermediate stations is 5 cents per 100 lb. In Chicago there is a charge for the pick-up and delivery of either 8 cents or 12 cents per 100 lb., depending upon the distance of the shipper or consignee from the railway freight station. For the purpose of this tariff, Chicago has been divided into two zones, the outlying zone naturally taking the rate of 12 cents per 100 lb. and the inner zone taking the rate of 8 cents per 100 lb.

The most recent establishment of pick-up and delivery service took place on November 1, 1931 when this service was extended to freight moving between Memphis and points on five radiating lines. One of these is the main line north from Memphis to Fulton, Ky., a distance of 122 miles. A branch from Dyersburg, a point on the main line south of Fulton, to Hickman, Tenn., a distance of 51 miles, is also served. A third line extends south from Memphis to Grenada, Miss., a distance of 100 miles; another extends from Memphis south to Clarksdale, a distance of 76 miles; and the last extends from Memphis southward to Greenville, Miss., a distance of 151 miles. The aggregate mileage covered by the newest store-door delivery operations of the Illinois Central is 510. At points on these lines a charge of 5 cents per 100 lb. for either pick-up or delivery, or 10 cents per 100 lb. for both, is assessed.

THE BROADWAY LIMITED of the Pennsylvania in the year 1931, the twenty-ninth year of its life, arrived in Chicago (westbound) exactly on time on every trip except three, and eastbound the record was substantially the same; making a percentage of 99.2.

THE BOSTON & MAINE's 184,871 passenger trains in the year 1931 made a record of 96.7 per cent on time. The Flying Yankee, running six days a week each way between Boston and Portland, 114 miles, in two hours, 15 minutes, was on time every day for ten months; and was late only three days in the entire year.

Table I—Investment in Property and Results of Operations, for Year Ended December 31, 1929, of Motor Companies Controlled in Whole or in Part by Class I Railroads

Names of Railroads and Motor Companies	Property Investment	Extent of R.R. control, percentage	Operating revenues	Operating expenses	Taxes	Net Income	Net Deficit
Atlanta & West Point							
Ga. Highway Trsp't. Co.	$24,769	50	$8,813	$9,863	$508		$1,441
Baltimore & Ohio							
Blue Line Transfer Co.	63,596	100					
Public Service Co-Ordinated Trans.	19,956	100					
W. Va. Transportation Co.	387,316	100	135,966	150,820	10,389		35,401
Boston & Maine							
B. & M. Transportation Co.	728,921	100					
Central of Ga.							
C. of Ga. Motor Transport Co.	43,929	92	25,043	33,244	1,890		11,679
Central of N. J.							
Jersey Central Transp. Co.	36,632	100	30,693	25,383	1,030	4,296	
Chicago & Alton							
Alton Transp. Co.	90,000	100	36,603	47,738	2,112		13,259
Gadberry Transp. Co.	6,485	100	7,309	11,151	360		4,108
Ritter Motor Bus Co.	6,443	100	9,951	14,815	569		5,449
Chicago & North Western							
Interstate Transit Lines			(See Union Pacific)				
Chicago, Burlington & Quincy							
Burlington Transp. Co.	299,109	100	89,425	156,592	6,237		67,587
Chicago, Milw. St. Paul & Pacific							
C. M. St. P & Pac. (rail operations)	44,305	100					
Chicago, St. P. M. & O.							
Wilson Transp. Co.	257,837	100	65,443	64,803	1,980		1,340
Colorado & Southern							
Denver & Interurban Co.	115,293	100	108,004	87,331	5,939		
Denver-Col. Springs-Pueblo Mtr. Way	......	25	(See Denver & Rio Grande Western)				
Denver & Rio Grande Western							
Denver-Col. Springs-Pueblo Mtr. Way	94,596	50	95,394	80,084	4,458	10,852	
Rio Grande Motor Way	39,615	80	58,632	41,771	2,523	14,337	
Rio Grande, Motor Way of Utah	62,185	80	7,685	9,167	246		1,728
Western Slope Motor Way	69,276	...	108,298	80,970	5,560	21,768	
Georgia Railroad							
Ga. Highway Transpt. Co.	......	50	(See Atlanta & West Point)				
Great Northern							
Northland Transportation Co.	3,707,164	30					
Northland Greyhound Lines, Inc., of Ill.	1,650,646	30					
Great Northern (rail operations)	2,273	100					
Illinois Central							
Central Transp. Co.	11,466	100	10,524	8,126			672
Maine Central							
The SamOset Co.	49,703	100	30,700	40,583	512		10,395
Missouri Pacific							
Mo. Pac. Transp. Co.	1,491,505	100	1,011,607	1,031,520	74,745		92,555
Monongahela							
Monongahela (rail operations)	7,490	100					
Nashville, Chattanooga & St. Louis							
N. C. & St. L. Motor Transit	42,849	100	10,996	23,825	2,309		
New York, New Haven & Hartford							
Berkshire Street Ry.	69,107	100					
County Transp. Co.	509,384	100	649,675	468,164	33,359	16,350	
New England Transp. Co.	4,822,584	100	3,257,581	2,958,870	207,328		79,886
Connecticut Co.	1,538,219	100					
Soundview Transp. Co.	803	99.6	81,067	86,156	2,255		8,037
Springfield St. Ry.	592,634	99.6					
Worcester Consol. St. Ry.	864,435	61.7					
Norfolk Southern							
Nor. Sou. Bus Corp.	41,226	100	48,511	51,403	2,122		5,156
Pennsylvania							
Buffalo Interurban Bus Lines	97,353	50	106,156	87,747	4,076	13,584	
Buffalo Storage & Carting Co.	287,627	84.9	240,223	213,629	3,902	22,692	
Cambria Bus Co.	71,038	...	35,721	35,459	3,701	2,253	
Greyhound Lines, Inc.	2,400,322	50	4,287,189	3,735,838		268,703	
Interstate Highway Limited	163,547	50	336,378	280,438		44,505	
Kane, Mt. Jewett Transit Co.	25,025	...	15,142	14,224	461	1,465	
Merchants Trucking Co.	18,136	69.1	7,863	6,235		1,628	
Montgomery Bus Co.	252,622	50	244,707	207,430	10,627	19,993	
Penna. General Transit Co.	374,149	50	118,288	119,302	6,781	2,742	
Penna. Indiana General Trans.	7,124	50	5,529	10,776	106	624	
Penna. Illinois Gen. Trans.	54	50	No. operations				
Penna. Transfer Co. of Pgh.	240,194	59.2	225,582	220,701	802	5,537	
Peoples Rapid Transit Co.	1,567,949	50	1,339,992	1,161,747	51,457	48,550	
Phila. Suburban Transit Co.	139,024	50	83,320	121,000	4,569		44,843
Penna. Virginia Transit Co.	97	50	No. operations				
Del. Mar. Va. Transport Co.	277	100	No. operations				
Reading							
Reading Transp. Co.	744,739	100	434,287	402,202		34,528	
Richmond, Fredericksburg & Potomac							
R. F. & P. Transp. Co.	125,000	100					
Richmond-Greyhound Lines	105,000	49					
Rutland							
Rutland Transp. Corp.	15,110	100	2,781	9,685	433		7,034
St. Louis Southwestern							
Southwestern Transp. Co.	1,048,558	100	722,674	952,140	34,819		264,286
Seaboard Air Line							
Motor Transp. Co. of the South	55,191	100	59,195	65,905	655		13,271
Southern Pacific							
Pacific Greyhound Corp. & subsidiaries	10,390,867	...	9,386,894	7,981,081	539,457	991,041	
San Jose Railroad	5,698	100					
Stockton Electric R. R.	11,139	100					
Pacific Electric Ry.	1,896,301	100					
Pacific Motor Transp. Co.	2,214	100					
Motor Transit Co.	2,497,379	66.7	567,533	611,445			38,738
Los Angeles Motor Coach Co.	......	50					
Spokane, Portland & Seattle							
S. P. & S. Transp. Co.	274,464	100	239,472	210,014	20,566		514
Texas & New Orleans							
Southland Greyhound Lines, Inc.	2,158,102	35 21	1,023,187	1,001,136	2,700	4,824	
Texas & Pacific							
Hollywood Transp. Co.	5,343	50	3,864	8,341	297		4,775
Texas-Pacific Coaches, Inc.	26,473	100	1,839	7,343	324		5,829
Union Pacific							
Interstate Transit Lines	1,745,373	78	659,195	718,186	41,697		127,580
Union Pacific Stages, Inc.	1,016,577	100	558,882	616,677	47,922		106,798
Union Pacific Stage Co.	116,140	100					
Utah Parks Co.	438,933	100					
Total (United States)	$46,114,891						

Shows Railroad Investment in Motor Transport

Interstate Commerce Commission reports 32 class I roads had put $46,000,000 into motor vehicle operations by January 1, 1930

AS a part of the proposed report of Attorney-Examiner Leo J. Flynn of the Interstate Commerce Commission, in the commission's investigation under Docket 23400, Co-Ordination of Motor Transportation, the first authoritative figures with respect to the investments of railways in motor transport operations and the results of those operations were made public. The statistics cover the situation as it existed on January 1, 1930, since which time there have been only a few changes in the motor coach operations of the railways and somewhat more extensive changes in their interest in motor truck operations. The conclusions embodied in Examiner Flynn's proposed report and excerpts from the remainder of the report were published in the *Railway Age* of January 9, the report having been made public on January 5.

Compilation of figures secured by the commission through railway replies to the questionnaires distributed during the investigation indicated that on January 1, 1930, 32 Class I railways had control in whole or in part of motor vehicle operations. This control was exercised either directly or through subsidiary or affiliated companies, and the total property investment of these 32 railways in motor vehicle operations was $46,114,891. During the six-months period from January 1 to June 30, 1930, the motor transport companies under railroad control operated 3,105 motor buses over 38,168 miles of intrastate routes and 27,633 miles of interstate routes. The total number of bus passengers carried was 35,930,847, of which 5,090,561 were interstate passengers carried by 10 lines, the others not having made a separation between interstate and intrastate operations. The total passenger revenues for the six-months period were $16,182,029, of which $3,371,391 was indicated as

Table II—Motor Bus Operating Data of Motor Vehicle Companies Controlled by Class I Railroads for the Period January 1 to June 30, 1930

Name of Carrier	Number of buses	Number of miles of routes: Intrastate	Number of miles of routes: Interstate	Number of passengers: Total	Number of passengers: Interstate	Passenger revenue: Total	Passenger revenue: Interstate
New England Region:							
Boston & Maine	95	338.00	598.00	715,338	246,315	$229,611	$183,415
Maine Central	5	39.00	.....	12,130	......	7,184	......
New York, New Haven & Hartford	638	1,767.91	2,174.75	22,329,369	3,782,269	3,156,013	1,149,830
Rutland	2	......	67.00	4,439	4,282	1,215	1,101
Total	740	2,144.91	2,839.75	23,061,276	4,032,866	$3,394,023	$1,334,346
Central Eastern Region:							
Baltimore & Ohio	27	602.50	60.00	183,813	653	$102,496	$788
Central of New Jersey	9	43.50	287.30	59,918	......	30,239	......
Pennsylvania	430	4.501.10	3.328.40	3,325,524	447,512	2,954,611	633,014
Reading	73	504.40	275.30	448,311	101,250	215,861	111,853
Total	539	5,651.50	3,951.00	4,017,566	549,415	$3,303,207	$745,655
Pocahontas Region:							
Richmond, Fredericksburg & Pot.	16	52.91	113.00	99,809	61,997	$127,559	$122,317
Southern Region:							
Atlanta & West Point	4	136.00	......	26,065	57	$9,720	$56
Central of Georgia	5	145.00	......	7,612	......	3,803	......
Illinois Central	1	99.00	......	5,098	......	7,901	......
Nashville, Chattanooga & St. Louis	3	27.20	......	5,432	......	3,664	......
Norfolk Southern	8	35.90	......	101,211	......	24,347	......
Seaboard Air Line	7	166.00	......	14,251	......	24,202	......
Southern	3	131.00	......	6,137	......	5,585	......
Total	31	740.00	......	165,806	57	$79,222	$56
Northwestern Region:							
Chicago & North Western				(See Union Pacific)			
Chicago, Milw. St. P. & Pac.	4	107.30	......	11,354	......	$5,457	......
Great Northern	218	4,981.00	4,593.00	1,817,486	......	1,568,018	......
Spokane, Portland & Seattle	34	208.50	......	83,338	......	78,857	......
Total	256	5,296.80	4,593.00	1,912,178	......	$1,652,332	......
Central Western Region:							
Chicago & Alton	10	114.00	......	23,251	......	$14,149	......
Chicago, Burlington & Quincy	38	662.90	193.00	119,988	23,054	121,713	27,458
Colorado & Southern	23	269.00	......	77,625	......	93,011	......
Denver & Rio Grande Western	39	1,151.00	......	45,068	......	120,872	......
Southern Pacific	648	13,152.93	6,443.00	4,383,250	335,761	4,097,634	1,056,637
Union Pacific System:							
Los Angeles & Salt Lake	73	534.00	195.00	9,115	......	45,041	......
Oregon Short Line	87	1,554.00	1,703.00	276,943	......	447,374	......
Union Pacific	188	1,356.00	4,874.00	493,360	......	1,006,537	......
Total	1,106	18,753.83	13,408.00	5,428,600	358,815	5,946,331	1,084,095
Southwestern Region:							
Missouri Pacific	192	2,341.20	1,498.30	695,408	76,495	557,772	68,048
St. Louis Southwestern	74	995.00	1,195.00	......	......	177,423	......
Texas & New Orleans	147	2,192.00	35.00	505,313	10,916	940,680	16,874
Texas & Pacific	4	......	......	44,891	......	3,480	......
Total	417	5,528.20	2,728.30	1,245,612	87,411	1,679,355	84,922
Total United States	3,105	38,168.25	27,633.05	35,930,847	5,090,561	16,182,029	3,371,391

revenue from interstate passengers on the 10 lines making the segregation. These figures do not include the statistics of motor vehicle companies which were neither affiliated with railways nor subsidiaries of them, though having contracts with railways for the transportation of passengers or property beyond the railway lines or in substitution for passenger train service.

On June 30, 1930, 17 Class I railways owned 551 motor trucks. During the first six months of 1930 these were operated over 8,863 miles of intrastate routes and 1,546 miles of interstate routes. These railways also owned 115 trailers. The number of tons of freight carried during the six-months period aggregated 413,259, of which 22,968 tons represented interstate business. The freight revenue was $1,580,862, of which $88,311 was from interstate traffic.

Indicating the rapid growth of the motor transport operations of the railways, it is pointed out that as recently as 1927, the Class I railroads operated only 745 motor buses over 2,856 miles of intrastate routes and 1,051 miles of interstate routes. Also in 1927, Class I railways owned only 114 trucks and 34 trailers which were operated over 2,000 miles of intrastate routes and 386 miles of interstate routes.

Excerpts from those portions of the proposed report which refer to the motor transport operations of the railways, and three tables included as appendices of the proposed report, follow:

Motor Transport Operations of Railways

Carriers subject to the act participate in motor vehicle operations (1) directly as part of their rail operations; (2) by organizing subsidiary companies which they control; (3) by contracts with independent motor vehicle carriers; and (4) by stock control in whole or in part in independent motor vehicle companies, sometimes through a holding company. The Monongahela and the Chicago, Milwaukee, St. Paul & Pacific conduct motor vehicle operations directly and the motor vehicle investment and operations are merged with and made a part of their rail operations. There are only a few instances of this kind and the motor operations are not extensive.

The practice of organizing subsidiary corporations with officers and directors composed of officers or employees of the railroad which owns the entire stock of the subsidiary corporation, except the necessary qualifying shares of directors, is the method most generally adopted for conducting motor vehicle operations in connection with rail operations. The Union Pacific and the Chicago & North Western own 77.95 per cent and 22.05 per cent, respectively, of the capital stock of $1.902,400 issued by the Interstate Transit Lines, which had a property investment of $2,093,955.14 as of June 30, 1930, and conducts motor bus operations in the territory served by the two railroads. The St. Louis Southwestern owns all the stock of the Southwestern Transportation Company, which had a property investment of $1,247,020.63 as of June 30, 1930. The Southwestern Transportation Company operates motor buses and motor trucks in connection with the St. Louis Southwestern. Other railroads which conduct motor vehicle operations through subsidiaries are the Boston & Maine, the Maine Central, the Baltimore & Ohio, the Central of Georgia, the Central of New Jersey, the New York, New Haven & Hartford, the Reading, the Southern Pacific, the Spokane, Portland & Seattle, the Chicago & Alton, the Chicago & Burlington & Quincy, the Texas & Pacific and the Missouri Pacific.

Some of the railroads which have an interest in, but not control of, motor vehicle companies through ownership of a part of their stock are the Colorado & Southern, the Great Northern, the Richmond, Fredericksburg & Potomac, the Southern Pacific and the Texas & New Orleans. An interest in or control of motor vehicle operations by a railroad is accomplished in a few cases by means of a holding company. The Pennsylvania owns the entire capital stock of the American Contract & Trust Co., the owner of 50 per cent of the common stock of the Pennsylvania Greyhound Lines, Inc. The Pennsylvania Greyhound Lines, Inc., controls the operation of eight bus lines in Pennsylvania territory, with a total property investment of $5,935,-667. The American Contract & Trust Co. owns 84.9 per cent of the stock of the Buffalo Storage & Carting Co., with a property investment of $296,835.88; also 59.2 per cent of the Pennsylvania Transfer Company of Pittsburgh, with a property investment of $259,925.73; and 69.1 per cent of the Merchants Trucking Company of Norfolk, Va., with a property investment of $16,497.13. It also owns stock in eight other trucking companies and 8.6 per cent of the common stock and 10.9 per cent of the preferred stock of the Greyhound Corporation.

The Pennsylvania has contracts with eight bus lines which provide line-haul transportation of passengers and baggage in connection with its rail operations. There is considerable variance in the terms of the contracts, no two providing for compensation on the same basis. The Pennsylvania also has contracts with four trucking companies, to supply truck service in lieu of station-to-station rail service. The basis of compensation varies in these contracts. The Pennsylvania also has a property investment of $134,605.56 in motor vehicle equipment which is leased to the Atlantic City & Shore Railway on the basis of 6 per cent per annum on the property investment.

Table I shows the property investment in motor vehicle companies controlled in whole or in part by Class I railroads, extent of control, operating revenues, operating expenses, and net income or deficit for the year ended December 31, 1929. Table II and Table III, respectively, show motor bus and mo-

Table III—Motor Truck Operating Data of Motor Vehicle Companies Controlled by Class I Railroads for the Period January 1 to June 30, 1930

Name of Carrier	Number of Trucks	Number of Trailers	Number of Miles of Routes: Intrastate	Interstate	Number of Tons: Total	Interstate	Freight Revenue: Total	Interstate
New England Region:								
Boston & Maine	131	44	1,779.00	178.00	177,859	2,500	$409,865	......
Maine Central	3	..	50.00	......	375	......	4,334	......
New York, New Haven & Hartford	109	..	1,364.00	537.00	96,363	......	258,686	......
Total	243	44	3,193.00	715.00	274,597	2,500	$672,885	......
Central Eastern Region:								
Baltimore & Ohio	25	..	20.70	17.70	12,078	1,279	$24,067	......
Central of New Jersey	2	1	65.70	......	1,029	......	10,104	......
Pennsylvania	158	40	2,484.50	513.00	97,236	15,658	498,081	$64,020
Reading	2	..	55.60	......	......	......	......	......
Total	187	41	2,626.50	530.70	110,343	16,937	$532,252	$64,020
Great Lakes Region:								
Monongahela	3	..	43.00	......	2,206	......	$3,922	......
Southern Region:								
Central of Georgia	4	..	110.50	......	2,642	......	7,757	......
Northwestern Region:								
Chicago, St. Paul, Minneapolis & Omaha	38	1	953.00	225.00	13,888	3,531	92,933	$24,291
Great Northern	1	..	73.50	......	54	......	37	......
Total	39	1	1,026.50	225.00	13,942	3,531	$92,970	$24,291
Central Western Region:								
Chicago, Rock Island & Pacific	..	..	......	......	3,397	......	$5,449	......
Denver & Rio Grande Western	16	..	541.00	......	5,656	......	64,943	......
Southern Pacific	16	..	135.00	......	476	......	5,191	......
Total	32	..	676.00	......	9,529	......	$75,583	......
Southwestern Region:								
St. Louis Southwestern	42	29	1,179.00	76.00	......	......	$195,493	......
Texas & Pacific	1	..	8.60	......	......	......	......	......
Total	43	29	1,187.60	76.00	......	......	$195,493	......
Total, United States	551	115	8,863.10	1,546.70	413,259	22,968	$1,580,862	88,311

tor truck operating data for motor vehicle companies controlled in whole or in part by Class 1 railroads for the period from January 1 to June 30, 1930.

Ten Class II railroads reported a property investment of $220,795 in motor vehicle equipment as of June 30, 1930, and operated 66 buses over 672 miles of intrastate routes and 289 miles of interstate routes. During the six-months period ending with June 30, 1930, the number of bus-miles totaled 981,-926 and the number of passengers carried, 274,988, for a total revenue of $162,733.

Class II steam railroads reported the operation of 18 trucks as of June 30, 1930, with a tonnage for the six-months period preceding amounting to 2,943 tons, for a total revenue of $46,920.

Fifteen Class III railroads reported an investment of $208,-203 in motor vehicle equipment as of June 30, 1930, and operated 51 buses over 470 miles of intrastate routes and 259 miles of interstate routes, and carried 56,615 passengers, for a total revenue of $118,586. During the six months ended June 30, 1930, the bus-miles totaled 692,874.

Class III steam railroads operated 20 trucks with a tonnage of 609 tons and a revenue of $35,806 during the first half of 1930.

New 2½-Ton Stewart Has 8-Cylinder Engine

A NEW 2½-ton, 8-cylinder motor truck chassis, designated as Model 58-8, is being produced by the Stewart Motor Corporation, Buffalo, N. Y. The engine develops 100 hp., and the chassis is available in 5 wheelbase lengths.

The engine, the cylinders of which are "in line," is of the L-head type, with a bore of 3⅜ in. and a stroke of 4½ in., the piston displacement being 322 cu. in. It is mounted on rubber with three-point suspension. Lubrication is by the full force feed system, and valve stems and tappets are automatically lubricated by spray from the crankcase. The crankshaft is equipped with a balancer on the front end. The radiator is of the tubular type with core, top tank and bottom tank in one unit. It is equipped with a thermostat to regulate the temperature of the motor. Standard equipment provides for battery ignition and a Delco-Remy starter and generator. The carburetor is a Stromberg and the feed to the carburetor from the gasoline tank is by means of an engine-driven fuel pump.

The chassis is equipped with a large multiple disc, dry plate ventilated drum type clutch, and both the clutch throw-out bearing and the clutch pilot bearing are of the enclosed type. The transmission is of the four-speed type, assembled in unit with the power plant. The drive shaft is a Spicer 2¼-in. tubular shaft, and the joints, being fitted with large metal covers, are dustproof and oil-tight. The rear axle is of the full floating spiral bevel gear truck type, and the front axle is a heavy drop forged I-beam with spring pads forged integral. Timken bearings are provided on the hubs and on the king pins. The front and rear springs are 3 in. wide and 40 in. and 50 in. long, respectively. The steering gear is of the Ross cam and lever type. The side rail frame has a depth of 9 in., and tubular radius rods are standard equipment.

Four-wheel Bendix integral expanding type service brakes are provided. All wheels are of the cast, hollow spoke type with dual wheels at the rear. Balloon tires are mounted on all wheels.

The standard wheelbase length is 170 in. There is also a short wheelbase of 160 in. and special wheelbases, available at extra cost, of 180 in., 196 in. and 226 in. The chassis weight is 5,970 lb., and the loading space is suitable for 9 ft. to 18 ft. bodies back of the driver's seat, depending on the wheelbase.

Wage Parley Opens at Chicago

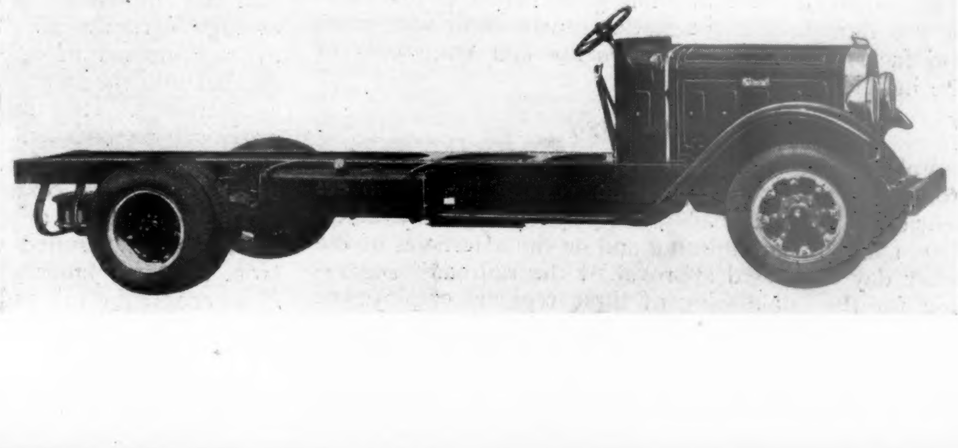
(Continued from page 160)

forecast the purchase of more supplies and equipment, which will also tend to stimulate business in general. In referring to recent curtailments in employment, he said that if the wage cut was not accepted, further reductions in payrolls must be made in the immediate future. Some employees and company unions, he pointed out, had already taken wage cuts, while the salaries of non-union employees have also been reduced. He also discussed recent developments, including the freight rate increase, the formation of the Railroad Credit Corporation and the impending formation of a two billion dollar national reconstruction corporation to aid depressed railroads, saying that while they were important factors in themselves, the 10 per cent reduction in wages added to these other aids, would place the roads in a much better position financially.

Railroads Consider Labor's Plan

In reply to labor's proposals, at a Sunday morning session on January 17, the railroad presidents expressed an understanding of and a desire to assist in the solution of labor's problems. The presidents, in discussing stabilization of employment, agreed that whatever may be practicable should be done to remove the feeling of uncertainty which may be entertained by many employees. They did not think it practicable to assure the employment of a definite number of persons in every class for one year, but agreed to carry on negotiations in an effort to stabilize employment, although they could not encourage the thought that stand-by forces can be assured of a minimum amount of work each month.

The presidents were unable to accept the conclusion of the unions that the six-hour day is necessary and



The New Stewart Truck Chassis

must be instituted in order to absorb the existing number of experienced employees without reductions in pay and at the present time they are not willing to recommend the appointment of a commission to determine ways and means of applying this principle to the different classes of employees. The committee also expressed doubt of the wisdom of recommending to Congress, at present, a billion-dollar bond issue for grade separation, but felt that the employees can assist materially in seeking revised legislation providing for a more equitable division of the expense of grade crossing elimination.

Favor Regulation of Highway Transportation

Railroad officers and the representatives of labor were in accord on the suggestion for the fair and proper regulation of motor vehicles engaged in highway transportation, feeling that no unfair or unjust burden should be placed upon transportation agencies of any character. The presidents welcomed the opportunity to work with their employees in an effort to secure national and state legislation necessary to remove the privileges enjoyed by motor transportation which are prejudicial to the railroads. Since the regulation of freight forwarding companies is being investigated by the Interstate Commerce Commission, the presidents questioned the wisdom of attempting to reach any conclusion with reference to this subject at the present time. The committee felt that the proposal that furloughed railroad employees be given opportunity for employment by motor companies and forwarding agencies when controlled by railroads has merit and was willing to recommend to railway executives that, consistent with the requirements of the service, preference be given to such employees when additional men are required.

The presidents could not reach a conclusion on the proposal submitted by the employees relating to railroad consolidation, owing to conflicting viewpoints concerning certain phases of the subject. They declined to express themselves on federal legislation to provide retirement insurances and elective workmen's compensation since these matters are now being studied by a joint committee from several of the eastern railroads and the unions.

The establishment of an emergency employment bureau was received sympathetically by the presidents who were willing to establish regional employment bureaus and suggested that they be placed under the direction of E. J. McClees, secretary of the Bureau of Information of the Eastern Railways, New York, J. W. Higgins, secretary of the Association of Western Railways, Chicago, and Charles P. Neill, manager of the Bureau of Information of the Southeastern Railways, Washington, D. C.

The presidents believed that train lengths and train crews should be co-ordinated on the basis of economical and safe operation, but because of the difficulty of agreeing on what is safe and economical, they doubted the wisdom of recommending joint action at this time. It was thought that the matter can be dealt with more satisfactorily by the managements and employees of the individual railroads.

Unions Reply

Following the railroads' reply to the labor organizations' program, the representatives of the employees considered the railroads' viewpoint on Sunday afternoon and Monday morning and on the afternoon of the latter day expressed approval of the railroads' suggestion for the establishing of three regional employment bureaus. The approval carried with it the stipulation that these bureaus will call upon the chief executive of the organization of the class of labor required who will furnish the necessary men.

In connection with the proposal for the stabilization of employment, the unions presented the following inquiry:

"Would the railroads agree to guarantee, during the period for which they have proposed a pay roll deduction, to maintain as a minimum amount of work not less than the total man hours worked by each class of employees in the year 1930; the distribution of this work to be made by mutual agreement between the representatives of the employees affected and the management of each railroad, contemplating the full observance of existing schedule rules unless otherwise agreed by the parties to the existing agreement? (As to the Pullman Company this suggestion contemplates the restoration to service of conductors in service as of January 1, 1930, so far as the lines remain in operation)."

Wage Reduction Discussed

The carriers' proposal for a 10 per cent reduction came before the meeting on January 19, when, during the two hour morning session, the labor leaders, through Mr. Robertson, asked the railroad presidents for specific information to support their demand for wage reductions. Mr. Robertson sought information as to the interest and other charges the railroads must meet, the money available for these payments, what the railroads expect to do with the savings resulting from the wage cut if agreed upon and whether the railroads are asking the employees to accept a pay cut because other industries have reduced wages. He also asked the railroads to confine their statistics relative to the wage question to those demonstrating the needs of the railroads in meeting their fixed charges and maintaining their credit.

Mr. Robertson objected to data concerning the cost of living when based on a period of years, saying that many conditions now prevail which make it impossible to determine a proper wage based on living costs of several years ago. He also argued that many employees are now devoting portions of their earnings to helping unemployed workmen and that the livelihood of employees is paramount to earnings on capital.

Exception was also taken to Mr. Willard's figure of $26,000,000,000 as the value of railroads, Mr. Robertson contending that it has been demonstrated in the 15 per cent freight rate case that the valuation was nearer twenty or twenty-one billion dollars. The matter of employee earnings came into the discussion when he said that if a proper computation of the average daily wage in 1913 were made it would be less than $2 a day in contrast to the $2.80 per day cited by the railroads as the average wage in 1913. He questioned the fairness of using wage computations of that day to establish rates for the present period. He declared that the Interstate Commerce Commission's figures on average earnings are "false and unfair" because the average number of employees instead of the total was divided into the total compensation to secure the average earnings. He indicated that because of this wrong statistical method and because of part-time employment, sample groups of employees show earnings far below the figures commonly used.

This request for detailed information on the part of labor leaders resulted in a delay in the negotiations from noon on January 19 to the morning of January 21 to enable the railroads to compile the data requested.

Communications and Books . . .

Responsibility for Railway Situation

United States Senate,
January 7, 1932.

To the Editor:

There was circularized a copy of an editorial which was published in the *Railway Age* of December 12, 1931, entitled "Responsibility for the Railway Situation." Some of the contents of this editorial interested me, and I therefore wrote to the Interstate Commerce Commission on December 31, 1931, concerning it. The enclosed is a copy of a response I got, and it does not seem to sustain your editorial, at least fully. It undoubtedly confirms some of your editorial, but not all of it, and I am wondering if you would not think it well worthwhile to publish this.

James Couzens
Chairman, Committee on Interstate Commerce.

Interstate Commerce Commission,
January 5, 1932.

Honorable James Couzens,
United States Senate.

My dear Senator:

This will acknowledge receipt of your letter of December 31 enclosing copy of an editorial entitled "Responsibility for the Railway Situation", published in the December 12 issue of the *"Railway Age"*, and inquiring, in connection therewith, whether the Commission required a general reduction of rates in 1922 and also whether, prior to their application in the *Fifteen Per Cent Case, 1931,* the railroads made requests for increases in rates which requests were denied by the Commission.

In *Reduced Rates, 1922* 68 I.C.C. 676, the Commission rendered a decision, the effect of which was to require carriers by railroad, in all cases where their freight rates and charges had been increased in August, 1920, pursuant to the Commission's decision in *Increased Rates, 1920,* 58 I.C.C. 220, and had not subsequently been reduced by at least 10 per cent, to reduce them to a basis not exceeding 90 per cent of those made effective in August, 1920. This in most instances brought about a 10 per cent reduction in freight rates effective July 1, 1922. No reductions were required in passenger fares, baggage charges or express rates.

In 1925 a petition was filed with the Commission on behalf of the principal railroads in the western district, comprising the western group and mountain-Pacific group as defined in *Increased Rates, 1920,* which petition was docketed as Ex Parte 87. It was represented by those carriers that in 1924 they failed to earn 5.75 per cent by an amount which they estimated would require an increase of approximately 11 per cent in freight revenue but no definite proposal was made for any particular rate increases to accomplish that result. At the hearing they did not seek that per cent of increase but contended that the situation had become so acute that an emergency existed which impelled them to seek a general increase in freight rates in the western district of 5 per cent, subject to modifications and exceptions. Not only did the carriers fail to present evidence with respect to the need for changes in individual rates between particular points or on particular classes of traffic, but no State commission, shipper, security holder, or other representative of the public offered any feasible suggestions of this character. In *Revenues in Western District,* 113 I.C.C. 3, decided July 24, 1926, the Commission found that there was no evidence that such an emergency existed as would warrant the blanket increases sought in freight rates throughout the western district, and the petitions of the western carriers were denied. The Commission recognized, however, that there were many inequalities in the rate structures existing in certain portions of the western district, particularly in western trunk line territory where less favorable conditions existed so far as carrier revenues were concerned, and pointed out that it was the right and duty of the carriers to take the steps necessary to correct improper rate relationships and to supply revenue deficiencies by initiating suitable and specific changes in rates.

By a supplemental petition, docketed as Ex Parte 87 (Sub-No 1,) an increase in revenue was sought by means of an upward revision and readjustment of class rates in western trunk line territory. Following the filing of this petition the Commission instituted an investigation into the matter of class rates within western trunk line territory and between that territory and other territories. Extended hearings, embracing also numerous formal complaints, were held with respect to such rates. On May 6, 1930, the Commission rendered its report as a result of that investigation, *Western Trunk-Line Class Rates,* 164 I.C.C. 1, requiring a comprehensive revision of the rates involved. Generally speaking, the effect of the prescribed revision was to increase the rate level intraterritorially and to reduce it interterritorially. It was roughly estimated at that time that the rates authorized would yield from $10,000,000 to $12,000,000 increased revenues per year if the bases prescribed became effective on both interstate and intrastate traffic.

Aside from the foregoing, no formal petitions for general rate increases because of revenue needs were made by the railroads between the general reduction of 1922 and the time of the filing of the application in the *Fifteen Per Cent Case, 1931.*

Following the reduction of 1922 there was a sharp increase in traffic and in net railway operating income for the carriers of the United States as a whole. Net railway operating income from freight per net ton-mile increased more than 44 per cent from 1923 to 1929. While for the same period revenue per ton-mile decreased approximately 4 per cent, that cannot be attributed wholly, if at all, to public regulation. In numerous instances the carriers, because of competitive and commercial reasons, had found it necessary to refrain from taking advantage of all the opportunities to increase freight rates afforded by our decision and for like reasons had voluntarily reduced numerous rates. It was not until 1930 that there was a sharp falling off in traffic and earnings and this did not operate to substantially affect railroad credit until the first part of 1931.

As pointed out by the Commission's decision in the *Fifteen Per Cent Case, 1931,* indiscriminate increases in rates do not necessarily produce actual increased revenues and that this is so, is recognized by the carriers in admitting that even if the 15 per cent increase sought were granted, they would thereafter be impelled to make numerous downward adjustments of rates with a view to holding traffic and avoiding shrinkage in revenues.

Claude R. Porter, Chairman.

New Book

The German Railways. 112 pages, 12¼ in. by 9½ in. Illustrated. Bound in paper. Published by the Dutch-British Publishing Company, Ltd., The Hague, Netherlands.

This book, being distributed by the New York freight information office of the German Railroad Company, is sub-titled "What America Should Know About Them" and, as the introduction suggests, "By word and picture attempts to show what the German railways have to offer in the way of transportation of passengers and freight and what they accomplish through their modern organization." Chapters are included on German railway facilities in general, freight handling methods, types of freight cars, safety appliances, signaling, telephone and telegraph services, facilities for transshipment of freight, passenger services and railway personnel. Each of the foregoing sections is written by a specialist so that the book as a whole becomes the co-ordinated work of seven authors. The generous supply of illustration each conveniently placed adjacent to its applicable text contributes in no small part to the ease and interest with which the descriptive material is readily absorbed by the reader.

Odds and Ends . . .

The Pennsylvania's Broad Street Station

Fifty years ago, when it was first opened, the Pennsylvania's Broad Street Station in Philadelphia was the largest and most imposing railroad terminal building in America. Now its accommodations are scarcely as large as those afforded by the new suburban station recently opened on Sixteenth street, and they are quite unimpressive in comparison with the accommodations which will be provided in the new station at Thirtieth street when it is completed. During the fifty years in which it has been one of Philadelphia's landmarks, the Broad Street station has accommodated more than 500,000,000 passengers.

A New Industry As Is A New Industry

The Delaware, Lackawanna & Western is pointing with pride to one of its new industries. It is the Justrite Company, of Milwaukee, Wis., which has leased 9,400 sq. ft. of space in the Lackawanna's new Jersey City warehouse. The Justrite Company is a manufacturer of food and supplies for various kinds of pets, and its list of products is almost as impressive as that of a mail-order company. Among its products are ant eggs, balm for baldness, bird bitters, bird salve, color and pepper food, egg and nesting food, feather pulling remedy, fish tonic, love bird seed, moulting food, parrot tonic, shrimp fish food, song restorer, wild grass seed, and worm tablets for dogs and cats.

Travel Statistics

Every now and then some railway employee sits down and figures out how many miles he has covered in line of duty. Here are two examples which are interesting. George C. Schomp, chief engineer of the Lackawanna ferryboat, "Binghamton," has been ferrying back and forth across the Hudson river between Manhattan Island and Hoboken for 51 years. During this time he has traveled 760,000 miles—the equivalent of 165 transatlantic voyages, or 30 trips around the world. The other case is slightly different. An elevator operator in the Norfolk & Western general office building at Roanoke, Va., found, upon checking up, that in one day he made 420 round trips, which equals 42,000 ft. going up and 42,000 ft. coming down, or a total of 15 miles. In a year of 305 working days he covers 4,575 miles.

Less Work for the Claims Department

The Freight Claims division of the American Railway Association, is referring admiringly to the performance of the railways in handling the shipments of the A. E. Staley Mfg. Company. This company shipped 3,313 cars of starch in sacks last year, the loads averaging 56,000 lb. per car. The aggregate of claims for damage to these shipments during the year was only $721.60, or 23 cents per car.

We have also learned of 45 carloads of eggs, which were shipped during November from the Pacific coast to New York. These cars, incidentally, were loaded 25 per cent heavier than most cars of eggs. Nevertheless, all but two of the cars completed their trip across the continent with their eggs uncracked. Only 546 eggs out of 9,000,000, or one out of every 16,000, were broken, indicating that the safest place for an egg is on a freight train.

Sixty-eight Years Without an Accident

A few months ago mention was made of the record of E. O. Davis, switch foreman of the St. Louis-San Francisco at Springfield, Mo., who had piled up a record of 2,206 consecutive nights of work without losing any time whatever because of an injury. Now we learn from M. J. Flanigan, manager of the safety department of the Chicago, Milwaukee, St. Paul & Pacific, that four switchmen employed in the yards at Minneapolis, Minn., have worked an aggregate of 68 years without an injury. Switchman William J. Casey has worked 26 years, or approximately 93,600 hours, without an injury. Nearly as impressive from a safety standpoint is the record of Switchman August Nelson, who has worked 20 years, or approximately 60,000 hours, without an injury. Switchman Arthur Greenwood has worked 11 years, or approximately 27,800 hours, and Switchman Herman Kragero has worked 11 years, or approximately 23,040 hours, with no injuries to mar their records.

St. Louis "Discovers" Its Union Station

St. Louis, Mo., has at last discovered the beauty of its Union Station. The city, as a part of its civic beautification program, has razed the two blocks of dreary buildings which the station faced on the north, making it possible for residents and visitors to see the entire front of the building in all its architectural grandeur. The St. Louis *Globe-Democrat,* in a recent editorial, said, "We have revealed the Union Station in all its loveliness to our own people. Until now very few of us have known that we have been hiding behind two blocks of unlovely buildings that crowded the other side of a narrow street, one of the most beautiful structures in America. The present view of the Union Station from Chestnut street, or Eighteenth, or Twentieth is as nothing to the view that will be granted when the wreckage has been cleared up and the formal treatment of Aloe Plaza completed, when Market street has been widened, when the new Post Office rises across Eighteenth street to the east, and the other buildings and street betterments that will follow have offered their contributions in framing what is still among the largest and probably the handsomest passenger terminal in the world."

A Coolidge-Probert Story

L. C. Probert is now assistant to the president of the Chesapeake & Ohio and vice-president of the Pere Marquette. Before he went with the Van Sweringen lines, however, he was the head of the Associated Press bureau in Washington, D. C. Clinton W. Gilbert in his daily column, "The Daily Mirror of Washington," published in the New York Evening Post, recently related a story about Mr. Probert and former President Coolidge when both of them were residents of Washington. Late during the Coolidge administration the Probert home was burned down one night. The next morning Mr. Probert, as usual, was at his office. The telephone rang and he was told that the White House was on the wire. In a moment the unmistakable voice of the President said, "I see by the papers that you had a fire in your house." "Yes, Mr. President," replied Mr. Probert, "we had a bad fire." "Did you lose everything?" asked Mr. Coolidge. "Yes, Mr. President, we could not save a thing," said Mr. Probert "The house was burned to the ground. Mrs. Probert and I just got out ourselves." "That's too bad," said President Coolidge, "You know those blankets you gave me. I'll lend you those blankets. Of course, I'll want them back, but I'd be glad to let you have them."

Mr. Probert thanked Mr. Coolidge for the offer of the blankets but declined them, explaining that they were not needed. The President then went on. "Are you going to rebuild?" "Yes, Mr. President, we're going to put up a new house," replied Mr. Probert. The President, "Where are you and Mrs. Probert staying?" Mr. Probert, "We are living in a hotel." The President, "Why don't you come around and spend a few days with us in the White House." Mr. Probert, "Thank you, Mr. President. You are very kind, but we would not inconvenience you." Mr. Coolidge, "No trouble at all. Mrs. Coolidge and I would be glad to have you." Mr. Probert, "No, thank you again, Mr. President, I think you will see reasons why we should not accept your kind invitation." The President, "Well, sorry you can't come. Goodbye."

NEWS

Finance Corporation Bill Reaches Final Stages

Differences between Senate and House measures being reconciled in conference

A bill providing for the creation of the Reconstruction Finance Corporation, which is to aid in financing industry, commerce, and agriculture, chiefly through loans to banks and other financial institutions, and to make loans to or aid in the temporary financing of railroads, was passed by the House on January 15; but as the bill passed by the House was different from that passed by the Senate on January 11, it was necessary to reconcile the differences in conference. The Senate sent the bill to conference on Monday, with some additional amendments, and it was expected that it would be made a law before the end of the week.

Without waiting for final adoption of the conference report the President on Tuesday announced the appointment of Charles G. Dawes as president of the corporation and of Eugene Meyer, governor of the Federal Reserve Board, as chairman of the board and every effort will be made to have the corporation begin functioning as promptly as possible.

The House bill included an amendment offered by Chairman Rayburn of the committee on interstate and foreign commerce, providing that no fee or commission shall be paid by any applicant for a loan under the provisions of the bill, and that an agreement to pay or payment of any such fee or commission shall be unlawful. Mr. Rayburn said the amendment was indorsed by and was suggested to him by members of the Interstate Commerce Commission; that in conversation with Commissioners Eastman and Mahaffie they had expressed the belief that such an amendment is necessary."

"Now, this is what happens", Mr. Rayburns said: "When any bureau or any board of this government has money to distribute among corporations or individuals these corporations or individuals have their own executives and lawyers. They have their own organization that can file their claim with this department without any intermediary and get this money. We have a great many ex-congressmen, a great many ex-senators, a great many ex-members of boards and commissions who have opened up law offices in Washington. What they do is to go out and, by a campaign, convince these people, who are going to get money from these departments, or these bureaus, or these commissions, that the only way they can get it is to pay them 10 per cent of the amount or more. The Interstate Commerce Commission is called upon in this bill to recommend and approve an application by a railroad for a loan under its provisions. Before the Interstate Commerce Commission, which is supposed to know all about these matters and is supposed to go into them minutely, approves a loan of $1,000,000 or $2,000,000, or any amount, they want to believe that when they approve it, and when the money is paid over, the railroad that is in such distress will get all of it and not some attorney or some ex-commissioner, or some ex-attorney for a board, or something like that, will get 10 per cent or 20 per cent of the original amount."

In its annual report the commission had also said that information that had come to it indicated that in some instances the awards of compensation made by it to railroads for the carriage of the mails had in large part been diverted from the corporation by the payment of counsel fees therefrom, upon a contingent basis, less at least prima facie excessive, and that the purpose for which the compensation was awarded was thereby defeated in substantial degree. It recommended that Congress consider the prevention of future unreasonable diversions of this character by a limitation in the appropriation bill. Several years ago it had also called attention to the payment of large fees to counsel in connection with the payment of claims to short line railroads in reimbursement of deficits for the federal control period.

Freight Traffic in November

The volume of freight traffic moved by the Class I railroads in the first eleven months of 1931 amounted to 317,484,575,000 net ton-miles, according to reports compiled by the Bureau of Railway Economics; a reduction of 19.2 per cent, under the corresponding period in 1930, and of 30.4 per cent under the same period in 1929. The Eastern district for the eleven months reported a reduction of 18.5 per cent; the Southern district 19.1 per cent and the Western 20.3 per cent.

For November the total for the country was 25,085,770,000 net ton-miles, which, compared with November, 1930, was a reduction of 7,223,840,000 net ton-miles, or 22.4 per cent; and it was a reduction of 35.2 per cent under November, 1929. In the Eastern district, the November reduction was 21.7 per cent; in the Southern it was 23.0 per cent, and in the Western 23.1 per cent.

Canadian Merger Scored by King

Liberal leader promises fight if C. N. R.—C. P. R. fusion is attempted

A warning from Rt. Hon. W. L. Mackenzie King, Liberal leader, at a big meeting in Winnipeg last week that he proposed to keep the country advised of any attempt on the part of the present Conservative Government at Ottawa to strangle the Canadian National by means of a merger with the Canadian Pacific or in any way to curb its activities or reduce its usefulness through employment of any "underhand means" threw a new light on the present investigation being conducted in Canada by a Royal Commission into the main factors that have brought the two roads into their present sad financial plight.

The Commission covered the eastern half of the Dominion last week taking evidence at Halifax and at Montreal. At the former city they heard a strong plea for forcing more freight traffic along east and west channels, while in Montreal the Commission was told that blind and ill-timed competition and political patronage had eaten into the economic strength of the two roads. Rail-bus competition also was the subject of representations. This week the Commission is holding sittings in Toronto. Following those the Commission will go to Ottawa for final hearings.

The Maritime Transportation Commission and the Halifax Board of Trade joined forces last week to assert the necessity of an east and west traffic policy in the development of Canada. Presenting a submission on behalf of the Maritime body before members of the royal commission on transportation, R. K. Smith, M.P., declared that the east and west policy, written into the acts of union and repeatedly reiterated, had never been fully realized, with consequent inadequate use of Maritime province ports.

Diversion of eastward moving commodities to United States ports was cited in illustration, and the submission declared that not only was full support for the policy necessary to the Dominion's greatest development, but that as in the particular case of grain, quoting from statements of Col. E. C. Phinney, chairman of the Halifax Harbor Commissioners, "detailed studies have convinced us that a rate can be made that will result in the use of the National Trans-

(Continued on page 185)

Operating Statistics of Large Steam Railways—Selected Items for the Month of November, 1931

Region, road and year		Average miles of road operated	Train-miles	Locomotive-miles: Principal and helper	Locomotive-miles: Light	Car-miles: Loaded (thousands)	Car-miles: Per cent loaded	Ton-miles (thousands): Gross Excluding locomotives and tenders	Ton-miles (thousands): Net Revenue and non-revenue	Average number of locomotives on line: Serviceable	Unserviceable	Per cent unserviceable	Stored
New England Region:													
Boston & Albany	1931	402	132,794	137,589	9,049	3,516	64.9	183,317	61,001	75	58	43.4	21
	1930	407	140,344	148,794	14,230	3,912	64.7	207,121	72,102	86	44	33.6	34
Boston & Maine	1931	2,066	289,673	325,208	29,688	9,338	65.9	507,901	184,181	172	115	40.0	33
	1930	2,066	338,420	384,585	39,832	11,226	65.7	621,958	233,945	257	40	13.5	71
N. Y., New H. & Hart.	1931	2,043	377,762	441,900	23,174	11,912	63.7	650,977	239,631	238	105	30.7	13
	1930	2,094	405,396	473,546	28,332	13,425	62.0	771,245	295,601	271	81	23.1	41
Great Lakes Region:													
Delaware & Hudson	1931	852	234,628	301,588	30,271	7,178	59.9	456,026	206,629	244	28	10.2	132
	1930	875	288,485	383,052	42,308	9,179	59.2	592,834	270,437	236	34	12.7	95
Del., Lack. & Western	1931	998	348,642	381,939	41,355	11,040	65.6	628,262	245,218	213	58	21.4	40
	1930	998	407,690	450,583	50,898	13,445	65.0	776,994	308,670	226	58	20.5	32
Erie (inc. Chi. & Erie)	1931	2,316	652,647	680,592	51,023	27,252	59.7	1,695,972	618,481	375	120	24.2	115
	1930	2,316	777,714	813,354	70,473	33,367	60.1	2,076,279	796,035	382	93	19.5	99
Grand Trunk Western	1931	1,021	191,640	192,979	1,204	4,648	61.3	273,297	95,193	109	41	27.5	37
	1930	1,020	223,184	226,442	3,979	6,006	62.1	350,202	127,151	114	38	24.8	38
Lehigh Valley	1931	1,343	388,049	408,375	36,412	11,222	61.2	692,443	273,450	211	154	42.2	25
	1930	1,343	447,768	480,064	46,958	13,863	62.1	852,045	349,547	246	103	29.5	27
Michigan Central	1931	1,869	351,786	352,637	8,436	10,322	59.7	606,283	203,809	151	72	32.2	58
	1930	1,865	405,584	406,646	13,009	13,168	59.6	779,647	266,897	157	60	27.5	44
New York Central	1931	6,158	1,493,636	1,604,023	84,088	53,980	59.0	3,376,425	1,327,332	792	579	42.3	225
	1930	6,468	1,756,103	1,903,483	125,469	64,021	59.1	4,058,935	1,640,370	966	355	26.9	311
New York, Chi. & St. L.	1931	1,660	444,048	453,387	1,703	13,409	60.3	784,111	272,294	170	72	29.7	59
	1930	1,660	545,627	552,478	7,459	16,643	59.0	992,625	349,200	199	63	24.0	41
Pere Marquette	1931	2,200	293,053	300,241	2,983	7,138	59.9	446,876	170,975	147	31	17.4	36
	1930	2,201	343,811	347,926	2,826	8,144	57.5	521,599	200,296	166	20	10.8	36
Pitts. & Lake Erie	1931	235	69,045	70,271	903	2,662	55.7	225,074	123,366	55	25	31.5	30
	1930	232	93,585	96,410	1,204	3,326	56.6	271,634	148,008	59	12	17.3	28
Wabash	1931	2,497	528,871	549,769	9,625	15,682	61.7	913,005	299,812	246	156	38.8	66
	1930	2,497	671,027	697,056	8,945	19,238	60.7	1,153,138	400,279	309	94	23.2	44
Central Eastern Region:													
Baltimore & Ohio	1931	5,536	1,235,840	1,398,445	149,653	35,895	57.4	2,461,201	1,034,850	804	359	30.9	252
	1930	5,541	1,525,421	1,761,043	205,376	45,589	57.8	3,160,706	1,375,553	883	291	24.8	172
Big Four Lines	1931	2,792	590,822	606,899	14,593	16,729	60.1	1,093,957	492,641	271	163	37.6	51
	1930	2,712	663,242	692,308	24,303	20,232	58.7	1,357,464	616,970	292	155	34.6	38
Central of New Jersey	1931	692	165,219	180,305	28,825	4,801	55.2	332,738	146,046	119	58	32.8	41
	1930	692	203,647	221,370	33,445	5,966	55.9	414,862	188,867	149	38	20.3	21
Chicago & Eastern Ill.	1931	939	169,284	169,612	2,111	3,798	60.1	247,949	104,269	90	70	43.9	43
	1930	946	195,830	196,533	2,940	4,857	61.1	313,185	134,259	91	59	39.1	35
Elgin, Joliet & Eastern	1931	447	78,014	81,006	2,193	1,769	57.2	140,373	66,874	86	5	5.9	28
	1930	453	111,657	116,035	5,671	2,824	58.5	226,949	109,258	75	19	20.6	10
Long Island	1931	400	41,343	42,451	14,290	426	52.9	31,478	11,631	41	8	17.2	4
	1930	400	45,674	49,385	11,305	589	53.5	42,052	15,611	38	8	18.1	...
Pennsylvania System	1931	10,628	2,748,427	3,085,392	297,483	93,226	60.3	6,218,021	2,654,403	2,243	285	11.3	967
	1930	10,675	3,415,000	3,839,952	381,367	114,924	59.0	7,929,029	3,443,944	2,339	307	11.6	699
Reading	1931	1,450	445,762	483,473	47,205	11,983	56.7	887,624	412,194	327	88	21.2	94
	1930	1,448	560,643	610,160	52,025	14,973	56.3	1,118,710	528,513	312	68	18.0	37
Pocahontas Region:													
Chesapeake & Ohio	1931	3,106	867,443	905,619	30,277	34,389	55.5	2,805,675	1,493,394	605	81	11.8	253
	1930	3,113	1,101,110	1,168,890	45,325	40,259	53.8	3,432,154	1,825,442	595	104	14.9	138
Norfolk & Western	1931	2,272	587,822	627,102	25,771	20,516	59.2	1,688,372	881,175	448	35	7.2	166
	1930	2,230	727,556	788,886	40,094	25,560	56.8	2,187,178	1,137,064	455	42	8.4	132
Southern Region:													
Atlantic Coast Line	1931	5,144	544,857	546,533	8,082	11,217	59.9	603,772	194,814	386	96	19.9	112
	1930	5,160	672,384	677,573	10,116	15,266	58.0	869,436	295,326	400	73	15.5	103
Central of Georgia	1931	1,900	204,258	205,152	2,943	4,594	67.4	246,335	90,463	104	44	30.1	3
	1930	1,900	221,735	222,465	3,714	5,155	65.4	289,359	111,255	119	29	19.9	7
Ill. Cent. (inc. Y. & M. V.)	1931	6,670	1,340,724	1,353,059	23,434	31,192	56.8	2,155,982	823,482	757	165	17.9	57
	1930	6,689	1,578,162	1,592,783	29,679	39,871	56.9	2,754,991	1,086,190	728	161	18.1	56
Louisville & Nashville	1931	5,263	994,193	1,050,690	26,957	20,364	57.3	1,419,124	647,252	509	195	27.7	143
	1930	5,249	1,285,728	1,360,568	37,367	26,767	56.7	1,911,254	889,448	571	131	18.6	119
Seaboard Air Line	1931	4,466	468,044	474,688	4,828	11,078	60.6	655,344	222,497	251	37	12.9	51
	1930	4,472	546,870	556,127	6,609	13,400	60.4	810,842	285,343	277	23	7.7	22
Southern	1931	6,675	1,131,862	1,146,345	18,774	26,000	63.0	1,454,246	540,241	781	182	18.9	225
	1930	6,676	1,271,392	1,292,073	23,421	29,157	62.0	1,682,098	640,981	820	171	17.2	207
Northwestern Region:													
Chi. & North Western	1931	8,459	989,194	1,022,375	24,879	23,443	61.2	1,390,069	504,030	669	136	16.9	209
	1930	8,459	1,142,275	1,187,409	26,089	28,398	61.4	1,720,493	666,965	729	132	15.3	149
Chi. Gt. Western	1931	1,459	225,893	226,099	13,554	7,178	58.0	443,018	159,195	74	42	36.2	4
	1930	1,459	263,177	284,557	25,603	8,172	59.6	500,354	179,649	93	15	14.1	2
Chi., Milw., St. P. & Pac.	1931	11,231	1,232,093	1,302,124	64,091	31,544	59.1	1,962,077	741,738	766	153	16.6	359
	1930	11,307	1,424,075	1,514,761	79,771	38,287	59.5	2,424,796	960,393	803	146	15.3	271
Chi., St. P., Minn. & Om.	1931	1,714	215,189	234,303	10,034	4,347	64.1	255,938	101,178	146	25	14.8	62
	1930	1,714	270,323	294,570	13,528	5,412	63.0	319,036	128,598	152	29	15.9	42
Great Northern	1931	8,311	609,644	616,509	20,656	19,327	66.8	1,137,705	477,093	484	146	23.2	125
	1930	8,334	761,427	773,762	30,144	26,519	67.6	1,581,278	704,767	482	141	22.6	88
Minn., St. P. & S. St. M.	1931	4,323	340,062	344,262	2,663	7,234	64.0	399,598	153,491	148	56	27.3	19
	1930	4,351	377,073	385,120	3,193	9,493	66.2	523,090	217,833	163	57	25.8	22
Northern Pacific	1931	6,402	564,815	595,568	37,811	16,402	67.0	952,404	391,563	396	125	24.0	68
	1930	6,478	674,197	718,908	49,470	20,901	65.3	1,245,298	514,840	391	117	23.0	38
Oreg.-Wash. R. R. & Nav.	1931	2,220	155,069	161,333	10,082	3,894	70.4	224,658	94,381	120	15	11.0	55
	1930	2,218	187,013	196,257	12,114	4,985	67.6	297,648	126,015	122	20	13.9	42
Central Western Region:													
Alton	1931	1,000	193,910	200,248	1,123	4,034	56.2	264,807	94,466	104	28	21.2	23
	1930	1,000	257,337	269,929	1,878	5,754	55.6	385,413	141,505	120	26	17.8	19
Atch., Top. & S. Fe (incl. P. & S. F.)	1931	11,623	1,494,448	1,604,434	70,932	43,097	60.6	2,681,050	895,092	745	204	21.5	231
	1930	11,346	1,745,578	1,884,767	92,441	53,282	59.6	3,325,811	1,104,283	776	179	18.7	173
Chi., Burl. & Quincy	1931	9,257	1,096,607	1,130,698	36,021	29,846	57.8	1,835,935	782,433	558	127	18.5	41
	1930	9,274	1,274,494	1,325,326	52,296	38,286	58.1	2,397,028	1,054,482	618	154	20.0	31
Chi., Rock I. & Pacific	1931	7,621	984,904	1,009,431	7,765	22,698	59.3	1,385,966	505,045	482	144	23.0	112
	1930	7,593	1,120,819	1,157,918	7,742	27,650	59.9	1,701,846	648,941	523	151	22.4	123
Denver & R. G. Wn.	1931	2,557	260,538	286,843	31,315	7,208	62.6	427,180	169,184	216	24	10.0	39
	1930	2,524	318,026	356,996	46,793	8,077	57.1	522,285	200,495	233	16	6.4	33
Los Angeles & Salt Lake	1931	1,241	171,513	185,256	18,620	4,798	63.0	272,437	96,596	101	13	11.4	33
	1930	1,220	174,082	189,566	19,851	5,015	62.6	296,812	111,293	112	7	5.6	41
Oregon Short Line	1931	2,515	254,899	264,628	17,401	7,419	63.6	458,414	183,095	171	6	3.3	63
	1930	2,537	336,558	349,140	23,392	10,062	60.7	657,375	262,735	175	5	2.8	42
So. Pacific—Pacific Lines	1931	8,937	1,054,640	1,126,828	107,607	31,230	61.5	1,925,963	632,253	654	289	30.7	230
	1930	8,984	1,299,596	1,394,445	153,280	39,825	61.2	2,461,129	833,476	713	233	24.6	200
Union Pacific	1931	3,768	847,343	867,749	35,166	31,375	61.9	1,876,800	637,747	418	38	8.4	174
	1930	3,765	1,123,453	1,147,646	52,772	39,911	58.5	2,501,171	827,415	434	35	7.5	117
Southwestern Region:													
Gulf, Colo. & S. Fe	1931	1,965	201,167	207,305	3,804	6,351	62.4	394,636	162,364	93	29	24.0	17
	1930	1,965	201,261	209,950	4,268	6,587	61.4	401,129	156,604	98	20	16.9	22
Mo.-Kans.-Texas Lines	1931	3,282	338,870	340,707	4,668	9,153	57.8	563,258	199,130	170	56	24.7	83
	1930	3,176	348,529	354,598	6,878	11,014	58.5	667,584	250,842	154	82	34.8	57
Missouri Pacific	1931	7,407	1,079,522	1,098,285	27,656	28,377	60.2	1,752,545	668,676	500	83	14.3	227
	1930	7,422	1,271,927	1,310,560	30,332	34,489	58.1	2,247,415	873,117	543	82	13.2	181
St. Louis-San Francisco	1931	5,175	639,380	643,581	6,998	13,979	58.3	870,208	322,214	403	76	15.9	106
	1930	5,169	670,886	678,617	9,373	16,630	59.8	1,026,718	389,394	392	77	16.4	57
St. Louis Southwestern Lines	1931	1,902	184,171	185,188	2,463	4,360	60.4	255,643	86,416	117	26	18.3	41
	1930	1,902	221,687	225,592	2,949	5,920	58.7	365,110	126,254	99	32	24.6	16
Texas & New Orleans	1931	4,686	488,847	490,529	1,553	10,450	59.2	645,704	229,836	233	97	29.5	40
	1930	4,680	575,696	578,935	2,548	13,451	63.6	811,362	313,928	254	70	21.7	51
Texas & Pacific	1931	1,955	286,230	286,230	2,025	7,005	57.2	456,170	153,774	186	60	24.5	41
	1930	1,951	364,829	364,829	3,921	9,816	57.1	637,192	230,249	193	48	20.0	31

Compiled by Bureau of Statistics, Interstate Commerce Commission. Subject to revision.

Compared with November, 1930, for Roads with Annual Operating Revenues Above $25,000,000

Region, road and year		Average number of freight cars on line: Home	Foreign	Total	Per cent unserviceable	Gross ton-miles per train-hour, excluding locomotives and tenders	Gross ton-miles per train-mile, excluding locomotives and tenders	Net ton-miles per train-mile	Net ton-miles per loaded car-mile	Net ton-miles per car-day	Car-miles per car-day	Net ton-miles per mile of road per day	Pounds of coal per 1,000 gross ton-miles, including locomotives and tenders	Locomotive-miles per locomotive-day
New England Region:														
Boston & Albany	1931	3,913	3,047	6,960	17.5	21,720	1,380	459	17.3	292	25.9	5,061	163	36.8
	1930	3,614	3,329	6,943	7.4	20,352	1,476	514	18.4	346	29.0	5,904	160	41.8
Boston & Maine	1931	10,812	7,703	18,515	11.3	23,553	1,753	636	19.7	332	25.5	2,972	109	41.2
	1930	11,267	9,139	20,406	7.7	23,230	1,838	691	20.8	382	27.9	3,774	112	47.6
N. Y., New H. & Hart.	1931	19,821	12,552	32,373	15.1	24,234	1,723	634	20.1	247	19.2	3,909	112	45.2
	1930	18,306	14,407	32,713	13.4	24,786	1,902	729	22.0	301	22.0	4,704	112	47.4
Great Lakes Region:														
Delaware & Hudson	1931	11,096	3,178	14,274	3.7	25,751	1,944	881	28.8	483	28.0	8,081	123	40.7
	1930	9,789	4,703	14,492	4.0	26,468	2,055	937	29.5	622	35.7	10,299	126	52.5
Del., Lack. & Western	1931	18,744	4,764	23,508	7.2	25,285	1,802	703	22.2	348	23.9	8,189	146	52.0
	1930	17,919	6,004	23,923	5.7	25,334	1,906	757	23.0	430	28.8	10,308	146	58.9
Erie (inc. Chi. & Erie)	1931	35,594	12,323	47,917	3.9	39,416	2,599	948	22.7	430	31.7	8,903	107	49.3
	1930	37,714	15,120	52,834	3.2	38,267	2,670	1,024	23.9	502	35.0	11,457	109	62.2
Grand Trunk Western	1931	4,973	7,778	12,751	9.5	24,447	1,426	497	20.5	249	19.8	3,107	105	43.0
	1930	4,603	10,614	15,217	8.1	23,677	1,569	570	21.2	279	21.2	4,157	110	50.7
Lehigh Valley	1931	22,270	6,218	28,488	10.2	29,331	1,784	705	24.4	320	21.5	6,788	143	40.7
	1930	20,555	7,881	28,436	7.4	27,537	1,903	781	25.2	410	26.2	8,677	151	50.4
Michigan Central	1931	26,240	16,053	42,293	6.6	30,879	1,723	579	19.7	161	13.6	3,635	116	53.9
	1930	24,904	14,985	39,889	5.3	33,074	1,922	658	20.3	223	18.5	4,769	113	64.6
New York Central	1931	79,104	64,390	143,494	14.5	33,898	2,261	889	24.6	308	21.2	7,185	104	41.1
	1930	79,280	63,642	142,922	7.4	32,911	2,311	934	25.6	383	25.3	8,454	106	51.2
New York, Chi. & St. L.	1931	15,983	6,590	22,573	11.1	29,405	1,766	613	20.3	402	32.8	5,467	105	62.7
	1930	16,172	8,645	24,817	6.9	27,815	1,819	640	21.0	469	37.9	7,011	108	71.2
Pere Marquette	1931	12,628	4,683	17,311	3.7	23,668	1,525	583	24.0	329	22.9	2,590	97	56.9
	1930	11,767	5,597	17,364	3.1	22,599	1,517	583	24.6	385	27.2	3,034	103	62.8
Pitts. & Lake Erie	1931	19,787	6,439	26,226	15.3	41,435	3,260	1,787	46.3	157	6.1	17,506	98	29.6
	1930	17,661	5,768	23,429	5.4	37,277	2,903	1,582	44.5	211	8.4	21,265	113	45.5
Wabash	1931	20,879	7,712	28,591	8.4	32,496	1,726	567	19.1	350	29.6	4,003	112	46.4
	1930	20,682	9,517	30,199	3.9	30,678	1,718	597	20.8	442	35.0	5,344	120	58.4
Central Eastern Region:														
Baltimore & Ohio	1931	80,748	17,061	97,809	5.7	26,094	1,992	837	28.8	353	21.3	6,231	145	44.4
	1930	80,406	23,961	104,367	5.6	24,955	2,072	902	30.2	439	25.2	8,276	152	55.8
Big Four Lines	1931	25,546	18,188	43,734	9.5	30,519	1,852	834	29.4	375	21.2	5,882	112	47.7
	1930	23,240	22,676	45,916	4.2	31,115	2,047	930	30.5	448	25.0	7,584	116	53.5
Central of New Jersey	1931	17,240	6,843	24,083	12.5	26,130	2,014	884	30.4	202	12.0	7,033	143	39.3
	1930	17,121	8,638	25,759	7.1	25,008	2,037	927	31.7	244	13.8	9,094	147	45.3
Chicago & Eastern Ill.	1931	6,050	2,240	8,290	14.1	27,033	1,465	616	27.5	419	25.4	3,702	128	35.8
	1930	13,091	3,066	16,157	49.0	26,604	1,599	686	27.6	277	16.4	4,730	132	44.4
Elgin, Joliet & Eastern	1931	9,425	3,860	13,285	9.3	15,783	1,799	857	37.8	168	7.8	4,986	128	30.5
	1930	9,722	5,339	15,061	4.7	15,538	2,033	979	38.7	242	10.7	8,043	128	43.2
Long Island	1931	782	4,939	5,721	1.0	6,527	761	281	27.3	68	4.7	969	349	38.4
	1930	718	5,656	6,374	1.0	7,099	921	342	26.5	82	5.8	1,300	338	44.2
Pennsylvania System	1931	243,979	53,498	297,477	6.1	30,942	2,262	966	28.5	297	17.3	8,325	129	44.6
	1930	233,046	66,888	299,934	5.0	30,159	2,322	1,008	30.0	383	21.6	10,754	129	53.2
Reading	1931	36,955	9,980	46,935	5.3	23,926	1,991	925	34.4	293	15.0	9,474	142	42.6
	1930	33,472	11,072	44,544	4.0	23,071	1,995	943	35.3	395	19.9	12,169	145	58.1
Pocahontas Region:														
Chesapeake & Ohio	1931	49,359	8,167	57,526	1.9	43,405	3,234	1,722	43.4	865	35.9	16,027	81	45.5
	1930	46,753	10,298	57,051	2.1	40,474	3,117	1,658	45.3	1,067	43.7	19,547	91	57.9
Norfolk & Western	1931	38,703	4,731	43,434	1.0	42,113	2,872	1,499	43.0	676	26.6	12,928	116	45.1
	1930	36,606	6,760	43,366	1.0	42,403	3,006	1,563	44.5	874	34.6	16,997	122	55.6
Southern Region:														
Atlantic Coast Line	1931	28,386	5,893	34,279	6.3	18,637	1,108	358	17.4	189	18.2	1,262	119	38.3
	1930	27,176	7,640	34,816	6.3	20,831	1,293	439	19.3	283	25.2	1,908	111	48.4
Central of Georgia	1931	7,938	2,014	9,952	18.4	20,120	1,206	443	19.7	303	22.8	1,587	134	46.9
	1930	7,256	2,781	10,037	12.2	21,386	1,305	502	21.6	369	26.2	1,952	139	50.9
Ill. Cent. (inc. Y. & M. V.)	1931	52,782	14,061	66,843	13.3	25,331	1,608	614	26.4	411	27.4	4,115	139	49.7
	1930	49,049	17,037	66,086	7.6	25,234	1,746	688	27.2	548	35.3	5,413	138	60.9
Louisville & Nashville	1931	51,431	6,750	58,181	16.1	21,736	1,427	651	31.8	371	20.4	4,099	150	51.0
	1930	49,231	10,545	59,776	12.0	21,389	1,487	692	33.2	496	26.3	5,648	141	66.4
Seaboard Air Line	1931	15,084	4,882	19,966	4.0	21,051	1,400	475	20.1	371	30.5	1,661	128	55.6
	1930	16,810	6,071	22,881	3.2	21,201	1,483	522	21.3	416	32.3	2,127	131	62.6
Southern	1931	56,760	10,742	67,502	14.0	20,332	1,285	477	20.8	267	20.4	2,698	154	40.3
	1930	53,964	13,646	67,610	13.1	19,962	1,323	504	22.0	316	23.2	3,200	158	44.3
Northwestern Region:														
Chi. & North Western	1931	45,363	18,886	64,249	7.8	21,033	1,405	510	21.5	261	19.9	1,986	135	43.4
	1930	52,443	22,952	75,395	9.9	21,085	1,506	584	23.5	295	20.5	2,628	140	47.0
Chi. Gt. Western	1931	4,885	3,904	8,789	8.4	32,432	1,961	705	22.2	604	46.9	3,637	133	69.0
	1930	4,546	4,166	8,712	8.0	29,182	1,901	683	22.0	687	52.5	4,104	140	95.7
Chi., Milw., St. P. & Pac.	1931	63,735	13,007	76,742	2.3	24,128	1,592	602	23.5	322	23.2	2,202	124	49.6
	1930	61,214	17,078	78,292	2.2	23,815	1,703	674	25.1	409	27.4	2,831	127	56.0
Chi., St. P., Minn. & Om.	1931	2,242	8,184	10,426	10.4	17,812	1,189	470	23.3	323	21.7	1,968	126	47.6
	1930	2,605	9,359	11,964	7.5	17,580	1,180	476	23.8	358	23.9	2,501	131	57.0
Great Northern	1931	44,442	11,061	55,503	6.5	26,388	1,866	783	24.7	287	17.4	1,914	137	33.7
	1930	43,133	10,683	53,816	4.5	27,877	2,077	926	26.6	437	24.3	2,819	131	43.0
Minn., St. P. & S. St. M.	1931	20,510	3,065	23,575	3.8	17,983	1,175	451	21.2	217	16.0	1,184	115	56.7
	1930	20,227	3,785	24,012	4.2	19,034	1,387	578	22.9	303	19.9	1,669	108	58.8
Northern Pacific	1931	41,815	5,098	46,913	10.0	24,463	1,686	693	23.9	278	17.4	2,039	155	40.5
	1930	40,591	6,210	46,801	8.3	25,689	1,847	764	24.6	367	22.8	2,649	156	50.5
Ore.-Wash. R.R. & Nav.	1931	8,453	2,111	10,564	3.6	22,955	1,449	609	24.2	298	17.4	1,417	164	42.4
	1930	8,141	2,923	11,064	4.6	22,796	1,592	674	25.3	380	22.2	1,894	162	49.1
Central Western Region:														
Alton	1931	10,769	3,371	14,140	23.7	25,969	1,366	487	23.4	223	16.9	3,150	126	50.9
	1930	10,313	3,939	14,252	6.4	24,930	1,498	508	22.7	306	24.2	4,355	137	62.1
Atch., Top. & S. Fe (incl. P. & S. F.)	1931	66,093	10,753	76,846	10.5	31,301	1,794	599	20.8	388	30.9	2,567	108	58.9
	1930	65,139	15,205	80,344	7.4	31,634	1,905	633	20.7	458	37.1	3,244	111	69.0
Chi., Burl. & Quincy	1931	45,938	12,977	58,915	7.2	25,627	1,674	714	26.2	443	29.2	2,818	127	56.8
	1930	46,357	16,946	63,303	5.1	27,144	1,881	827	27.5	555	34.7	3,790	124	59.5
Chi., Rock I. & Pacific	1931	38,736	10,441	49,177	11.7	22,549	1,407	513	22.3	342	25.9	2,209	141	54.1
	1930	37,067	14,141	51,208	8.3	22,521	1,518	579	23.5	422	30.0	2,849	143	57.7
Denver & R. G. Wn.	1931	12,972	3,872	16,844	3.4	22,172	1,640	649	23.5	335	22.8	2,206	170	44.2
	1930	11,802	4,629	16,431	2.8	20,693	1,642	630	24.8	407	28.7	2,648	177	54.1
Los Angeles & Salt Lake	1931	4,641	1,152	5,793	3.5	26,427	1,588	563	20.1	556	43.8	2,596	143	59.8
	1930	4,267	1,067	5,334	2.1	25,156	1,705	639	22.2	695	50.0	3,040	144	58.8
Oregon Short Line	1931	9,671	6,172	15,843	6.2	27,547	1,798	718	24.7	385	24.5	2,427	115	53.1
	1930	8,156	5,918	14,074	4.2	27,944	1,953	781	26.1	622	39.3	3,452	112	68.9
So. Pacific—Pacific Lines	1931	43,246	20,294	63,540	13.2	27,143	1,826	599	20.2	332	26.6	2,358	119	43.6
	1930	41,971	21,542	63,513	9.7	27,514	1,894	641	20.9	437	34.2	3,092	122	54.5
Union Pacific	1931	24,374	9,393	33,767	7.7	43,307	2,215	753	20.3	630	50.0	5,641	109	66.0
	1930	24,365	10,585	34,950	8.3	41,763	2,226	736	20.7	789	65.0	7,325	113	85.3
Southwestern Region:														
Gulf, Colo. & S. Fe	1931	13,628	2,370	15,998	3.3	30,455	1,962	807	25.6	338	21.2	2,754	95	57.5
	1930	11,682	2,700	14,382	2.8	30,885	1,993	778	23.8	363	24.9	2,657	99	60.5
Mo.-Kans.-Texas Lines	1931	12,244	3,955	16,199	4.5	26,745	1,662	588	21.8	410	32.6	2,023	93	51.0
	1930	14,379	5,856	20,235	5.1	28,264	1,915	720	22.8	413	31.0	2,632	96	51.0
Missouri Pacific	1931	30,566	13,694	44,260	12.0	26,403	1,623	619	23.6	504	35.5	3,009	128	64.3
	1930	32,908	17,050	49,958	8.4	27,224	1,767	686	25.3	583	39.6	3,922	128	71.5
St. Louis-San Francisco	1931	26,905	5,613	32,518	3.3	21,297	1,361	504	23.0	330	24.6	2,075	137	45.3
	1930	24,775	7,496	32,271	3.3	21,350	1,530	580	23.4	402	28.7	2,511	145	48.9
St. Louis Southwestern Lines	1931	5,753	3,412	9,165	9.2	21,670	1,388	469	19.8	314	26.3	1,515	114	43.8
	1930	6,685	3,283	9,968	7.6	24,155	1,647	570	21.3	422	33.7	2,213	105	57.9
Texas & New Orleans	1931	12,436	10,765	23,201	8.1	19,435	1,321	470	22.0	330	25.4	1,635	101	49.8
	1930	12,123	12,753	24,876	5.0	19,709	1,409	545	23.3	421	28.4	2,236	101	59.7
Texas & Pacific	1931	5,825	5,394	11,219	10.5	22,221	1,594	537	22.0	457	36.4	2,622	94	39.1
	1930	6,317	4,675	10,992	7.8	24,541	1,747	631	23.5	698	52.1	3,933	96	50.9

Railroad Trucks Found Operating Unlawfully

Massachusetts commission suggests legal proceedings against New Haven and B. & M.

The Massachusetts Public Utilities Commission, on January 15, handed down decisions in which it declared that the New York, New Haven & Hartford and the Boston & Maine, through their highway subsidiaries, are illegally operating motor trucks for the transportation of freight on the highways of the State and recommended that the attorney general immediately take such action as he may deem necessary.

The decision was made on the petition of the Motor Truck Club of Massachusetts, asking that the New England Transportation Company and the Boston & Maine Transportation Company be required to establish and apply reasonable rates for the transportation of freight by trucks. In the New Haven decision the commission states:

"Under the evidence we are of the opinion that the railroad is maintaining and operating motor vehicles not running upon the rails or tracks for the transportation of freight within this Commonwealth without the approval of the Commonwealth. Chapter 125 of the acts of 1925, by implication, at least, provides that railroads shall not maintain and operate motor vehicles upon the highways of this Commonwealth except with the approval of the department, and then only upon such routes, as in the opinion of the department, public convenience and necessity may require.

"We do not believe that the obligations imposed upon the railroad by Chapter 125 can be avoided by the railroad establishing a subsidiary which it absolutely dominates and controls. Obviously, the New England Transportation Company is a mere instrumentality by which the New York, New Haven & Hartford Company maintains and operates motor vehicles for the carriage of freight upon the highways of the Commonwealth. Chapter 125 provides that Section 70A shall not be construed to affect any right or privilege derived from the Constitution or laws of the United States. We assume that if the New York, New Haven & Hartford Railroad Company were maintaining and operating motor vehicles for the carriage of freight lawfully upon the highways of the Commonwealth, it would not be required to file tariffs relative to interstate transportation.

"It is provided in said chapter 125 of the Acts of 1925 that any railroad corporation, in maintaining and operating such vehicles, shall be subject to the provisions of Chapter 159 in respect to rates, fares and charges for services performed. Section 19 of Chapter 159 provides that every common carrier shall file with the department and shall plainly print and keep open to public inspection, schedules showing all rates, joint rates, fares, telephone rentals, tolls, classifications and charges for any service of every kind rendered or furnished, or to be rendered or furnished, by it within the Commonwealth, and all conditions and limitations, rules and regulations and forms of contracts or agreements in any manner affecting the same, in such places within such time, and in such form and with such details as the department may order.

"In the case of common carriers subject to the Interstate Commerce Commission the forms prescribed for such schedules and the requirements relative to the filing and publication thereof shall conform, as nearly as may be, to the forms prescribed by and the similar requirements of the said commission.

"In view of our conclusion that the railroad company, through the instrumentality of the New England Transportation Company, is operating motor vehicles for the transportation of freight contrary to the provisions of chapter 125 of the Acts of 1925, we are of the opinion that both the motion to dismiss, filed by the New York, New Haven & Hartford Railroad Company and the New England Transportation Company and the request for rulings of law filed by the complaint, the Motor Truck Club of Massachusetts, Inc., becomes immaterial, and that the attorney general be and hereby is directed, under the provisions of section 40 of chapter 159 of the General Laws, to begin an action or proceeding in the Supreme Judicial Court, in the name of the department, for the purpose of having the violation of chapter 125 of the Acts of 1925 by the New York, New Haven & Hartford Railroad Company stopped and prevented, either by mandamus or injunction."

The Boston & Maine decision is in effect the same as was rendered on the New Haven complaint. "Upon the evidence," the commission found, "the Boston & Maine Transportation Company is a mere instrumentality of the railroad by which it transports freight over the highways of the Commonwealth. We are of the opinion that it follows that the Boston & Maine Railroad is maintaining and operating motor vehicles for the transportation of freight through its instrumentality, the Boston & Maine Transportation Company, contrary to the provisions of Chapter 125 of the Acts of 1925."

As in the New Haven petition of the Motor Truck Club the commission recommended that the evidence be transmitted to "the attorney general for such action as he deems proper."

Short Lines To Hold Special Meeting

A special meeting of the American Short Line Railroad Association has been called by President Bird M. Robinson to be held in Washington on February 2 and 3 to consider various bills introduced in Congress relating to the regulation of railroads and other forms of transportation. Some of these bills, said Mr. Robinson, have been sponsored by senators and representatives who earnestly desire to aid the railroads, but "notwithstanding that fact, practically every one of such bills contains provisions that would be harmful and many of them seriously detrimental."

> The average American passenger train today consists of a trail of grimy, hearselike chariots propelled by a grimy locomotive. Poor salesmenship. The bus people long ago learned the value of a bright and attractive vehicle upon the exterior. The smart shopkeeper places a gay front upon his place of business. The lesson to the railroader should be obvious. Some day, somehow, it is going to be possible to ride upon the average American passenger train on a hot Summer day with the windows wide open, and in comparative cleanliness. And back of a steam locomotive. . . . The best solution of the railroad problem today must be in a bettered salesmanship of rail transport. The deadly competition of motor-trucks and motor-buses and other highly modern forms of carrying can, and eventually will, be regulated, to a large degree at least. Consolidation can and perhaps will come to do its part in the solution of the present crisis. But in the long run the American railroad can only thrive—can only survive—by selling itself to the American public.
>
> *—Edward Hungerford in the American Mercury.*

New Rules for Common Officers and Directors

I. C. C. seeks more information in revised regulations governing applications

The Interstate Commerce Commission has issued a revised set of regulations governing the procedure under which applications are to be made to it under paragraph 12 of Section 20a of the interstate commerce act for authority to hold the positions of officer or director of more than one carrier, superseding those dated June 19, 1922. The regulations apply to any persons authorized by or undertaking for each of two or more carriers to perform the duties, or any of the duties, ordinarily performed by a director, president, vice-president, secretary, treasurer, general counsel, general solicitor, general attorney, comptroller, general auditor, general manager, freight traffic manager, passenger traffic manager, chief engineer, general superintendent, general land and tax agent, or chief purchasing agent of a carrier. Applicants are required to furnish a specification of every carrier of which the applicant holds, stock, bonds, or notes, individually, as trustee, or otherwise; and the amount and description of the securities, owned or held by him, of each carrier for which he seeks authority to act. Whenever it is contemplated that the applicant is to represent on the board of directors of any carrier securities other than those owned by him, the application shall describe such securities, state the character of representation, the name of the beneficial owner or owners, and the general nature of the business conducted by such owner or owners.

In addition to full information as to the relationship existing between the carriers covered by the requested authorization, each applicant is required to specify every corporation—industrial, financial, or miscellaneous—of which he is an officer or director, and the general character of the business conducted by such corporation.

William S. Lee Heads American Engineering Council

William S. Lee, president of the Piedmont & Northern, has been elected president of the American Engineering Council. Mr. Lee, who is a past president of the American Institute of Electrical Engineers, succeeds Carl E. Grunsky of San Francisco, Cal., in the presidency of the Engineering Council and will hold office for a term of two years.

New York to Exempt 1931 Results from Savings Bank Law

The New York legislature has passed a bill exempting the results of the year just past from the requirement in the savings bank law that railways, if their bonds are to be legal investments for New York state savings banks, must earn their fixed charges 1.5 times. The measure now goes to Governor Roosevelt, who has already indicated his approval.

Continued on Next Left Hand Page

Maritimes Ask Below-Cost Rates on Wheat

Halifax urges reduction to figure comparable to present Quebec rate

Declaring that to give an 18-cent rate on wheat to Quebec was like giving a summer resort rate to Hudson Bay in the winter season, Premier R. B. Bennett stated last week in Ottawa at a meeting of the Privy Council called to hear the request of the ports of Halifax and Saint John for the same grain rates from the head of the lakes as are now enjoyed by the ports of Montreal and Quebec that the government might refer to the Supreme Court of Canada a stated case to determine whether or not the maritime provinces were entitled to the Quebec rate under the terms of the National Transcontinental Railway Act.

Appearing on behalf of the ports of Halifax and Saint John was Col. E. C. Phinney, chairman of the Halifax Harbor Commission, while C. H. J. Short, president of the Canadian National Millers' Association in Montreal presented the case of that organization and J. K. Smith, manager of the transportation department of the Montreal Board of Trade, appeared for Montreal business interests. W. N. Tilley, appeared on behalf of the Canadian Pacific to oppose the request.

Some time ago the Dominion Railway Commission ordered the Canadian National to reduce the rate on wheat from the head of the lakes from 34.5 cents per hundred pounds to 18.4 cents per hundred pounds on the ground that this was part of an agreement when the National Transcontinental Railway was constructed. The rate to Halifax from the head of the Lakes is one cent per hundred pounds more than the old rate to Quebec, but the one-cent differential has not been maintained. In other words, when the rate to Quebec was reduced to 18 cents the rate to Halifax was left where it was, at 35 cents.

Although the actual out of pocket cost of hauling grain from the head of the lakes to Quebec is about 25 cents per 100 pounds, according to W. Norman Tilley, counsel for the C. P. R., very little grain has moved over the National Transcontinental line from Armstrong to Quebec (it was only 1,000,000 bushels in 1930). The Halifax Harbor Commission is convinced the port of Halifax could attract some business if the rate were comparable to that of Quebec. It may be argued that the hauling of grain from the head of the lakes to Halifax by the railways at half the actual out of pocket cost is economically unsound, but Halifax contended it was part of the Confederation agreement.

Mr. Tilley argued that if the Quebec rate were extended to St. John and Halifax it would force all rates down, not only in Canada, but in the United States, whose railways would have to equalize their freight rates with those of Canada. He emphasized that the Quebec rate was a "red ink" figure, and that it did not really matter what the rate to Quebec was if no grain moved to that port.

Maritime Provinces interests have been complaining lately with considerable force that more Canadian grain has been exported to the markets of Europe via United States channels than via Canadian river and ocean ports. The difficulty with their contention is that Canadian grain can be exported more cheaply via Montreal and the St. Lawrence route during the summer and autumn months and via New York in the winter months than it can be via Saint John and Halifax.

The C. P. R. counsel pointed out that the Supreme Court of the United States recently had declared invalid the 29½ cent rate ordered by the Interstate Commerce Commission on the ground that it was confiscatory and the C. P. R. would like the whole question referred back to the Railway Board so that the Quebec rate could be considered also. He explained that the railways had never got excited about the 18-cent rate to Quebec because they thought no grain would move to Quebec anyhow. But if the C. N. R. were obliged to carry grain from the head of the lakes to Halifax for 19½ cents the C. P. R. would have to carry grain to Saint John for 19½ cents, and all rates would be forced down.

Premier Bennett hinted that the submission of a stated case to the Supreme Court might be the outcome of the Halifax appeal to the Privy Council. This could be done by order-in-council, he said.

Great Northern Handles Private Automobiles as Baggage

The Great Northern, on January 15, adopted the plan of handling private automobiles as baggage between all points. Under the plan of transporting private automobiles, an automobile requires three extra tickets where there are two or more railway passengers making the trip, and four extra tickets where there is only one such passenger. Stopovers cost $15 each to cover the additional handling charge.

Western Freight Rates May Be Reconsidered

The Interstate Commerce Commission has denied petitions of the Western Trunk Line and Official Classification line respondents for a re-opening, rehearing and modification of the commission's reports and orders in the Western Trunk Line class rate proceeding, with respect to the long-haul intra-territorial rates in Western Trunk Line territory and the inter-territorial rates between that territory and Official Classification territory, under which revised rates were put into effect on December 3. The denial, however, is without prejudice to petitioners, or other parties, filing new petitions on or after June 3, which should show, to the extent then possible, by tonnage and revenue figures the effect of the rate revision established.

End Waterway Waste, Atterbury Counsels

Transport facilities overbuilt — Why expand inefficient agency still further?

General W. W. Atterbury, president of the Pennsylvania, addressing the Birmingham (Ala.) Traffic and Transportation Club on January 15 declared himself emphatically against further extension of inland waterways in a nation already "superabundantly supplied with means for commercial transport." "Our problem," he said, "is not how to spend hundreds of millions more in providing additional facilities, but how to use most effectively those which we have." Continuing, he said in part:

"We have a vast system of railroads, the most highly developed in the world, and representing about two-fifths of the entire railroad plant of the world. Its present capacity for handling traffic is fully equal to double the calls upon it, and also fully equal to the peak demands of all time, as was demonstrated in the great period of commercial activity ending with 1929. In so far as freight is concerned, there is little doubt that the railroads could handle, without any trouble, twice the present volume of freight moving in the country by all means of transport put together.

"Side by side with this system of transportation we have created on the highways another stupendous system, largely, though by no means entirely, paralleling the first. But we have not been content to stop there. On the inland waterways of this country our governments, national and state, have been busily engaged in creating still another transportation system. Up to date it has cost approximately a billion dollars, and vast additional expenditures are planned for the future. Perhaps the most notable fact about this transportation system is that it has not extended service to a single region not supplied with adequate rail service. In that respect it differs sharply from highway transport which, while much of it parallels the railroads, has also provided access to large areas away from the rails.

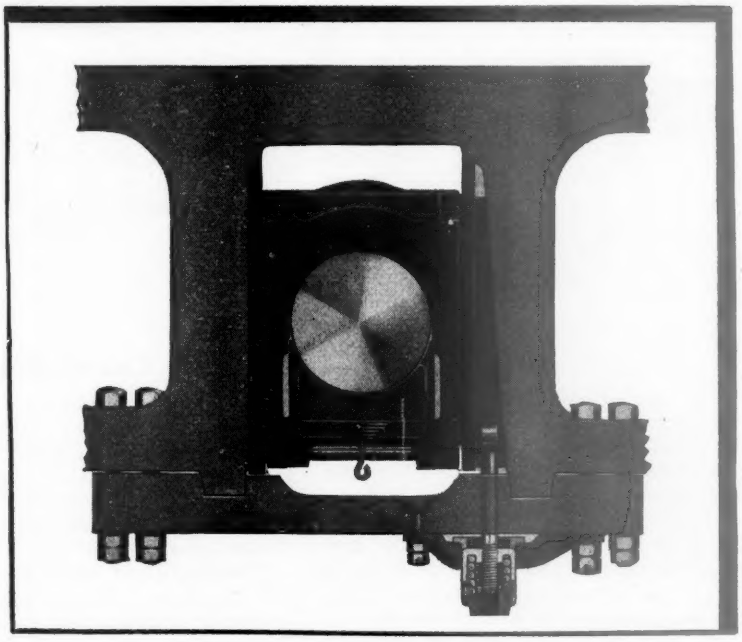
"Since 1914 the Panama Canal has made ocean shipping a large and steadily increasing factor in transcontinental traffic, with its influence extending far inland from the coasts of both oceans and the Gulf of Mexico. The effects are at present greatly magnified by the intense and unwholesome competition in the shipping industry.

"Most emphatically do I wish to express the belief that this country, burdened with stupendous taxes, faced with still heavier ones, with a badly unbalanced budget, and an enormous national debt, simply cannot afford to proceed under present conditions with building more inland waterways, for which there is no real need either currently existing or in reasonable prospect. Every mile of unnecessary inland waterway constructed by the government impairs by just so much the security of every savings bank de-

Continued on Next Left Hand Page

60%

GREATER MILEAGE FROM ROD BUSHINGS AND BRASSES



FRANKLIN AUTOMATIC ADJUSTABLE WEDGES

REDUCE MAINTENANCE ON LARGE EASTERN ROAD

So effective is the Franklin Automatic Adjustable Wedge in keeping out slack that one large road reports an increase of 60% in miles per lb. of rod bushings and brasses.

Wedge adjustment controls the life of brasses and bushings. If slack can be kept out, their life will be prolonged.

To do this requires a change of wedge adjustment as boxes heat up in service. Ordinary wedges, even if properly set when cold, cannot be right when the engine is at working temperature.

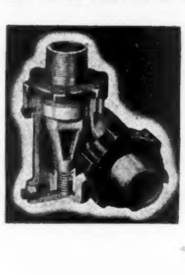
Only Franklin Automatic Adjustable Wedges can keep wedge adjustment always right and thus bar out slack.

Franklin Wedges adjust themselves with every turn of the drivers, providing for expansion as temperature increases.

They protect the foundation of the locomotive and keep maintenance in check.

FRANKLIN RAILWAY SUPPLY CO., INC.

NEW YORK CHICAGO MONTREAL



THE FRANKLIN SLEEVE JOINT
assures a full opening and unrestricted passage for air, steam and oil.

positor and the protection of every life insurance policy beneficiary in the United States, through additional needless dilution of the traffic which furnishes the earning power behind railroad bonds.

"The country is entitled to that form of transportation service which is cheapest and best. If it could be shown that canalized rivers met that description, the policy of proceeding with this work would be a wise one, provided operation were left entirely in the hands of private enterprise, required to sustain all of the real costs including capital charges and maintenance.

"But when competent analysis shows that less than half the real costs of the principal common carrier barge line are provided out of rates—the remainder, representing chiefly interest on investments in equipment and waterways, and expenditures for waterway upkeep, being borne by the taxpayers—we are confronted with subsidized competition against the railroads. That fact is manifest, without analysis, by the circumstance the Inland Waterways Corporation, owned and operated by the government, paying virtually no taxes, no capital charges on the waterways it uses, and nothing toward keeping them in repair, has still been unable, over a period of years, to earn from its rates the bare operating expenses of its barges. That has been the case, even though the salary of the major general who manages the corporation is donated by the War Department and the very substantial costs of maintaining the corporation's Washington office are not included in the operating expenses.

"I do not believe in subsidized transportation. I do not believe in the government engaging in business of any kind. Nor do I believe in the government using the resistless power of taxation to enter into competition with its own citizens. The need in the transportation industry is not for more but for less competition. It is an urgent need. In particular, we should seek to eliminate those forms of competition which serve no useful purpose but are merely wasteful and destructive. We should end the unjust situation in which the railroads are regulated almost to the last detail of their business while the other forms of transportation, competing with them, are for the most part unregulated or practically so. We should study the economic utility of the various agencies of transport service from the single viewpoint of the public interest, with the object of largely if not entirely substituting co-ordination for competition between them, and of assigning each to duty in those fields in which it is most efficient as to costs and character of service rendered.

"Happily, the outlook for real progress in these respects appears to me more promising than at any time in the past. With the recommendations of the Interstate Commerce Commission favoring transport co-ordination, President Hoover has placed himself in complete accord. They are constructive, progressive and encouraging. As a representative of the railroads, I am glad to have the opportunity of saying so publicly. As to the prospect of prompt and favorable action upon them by Congress, I recognize the difficulties arising from the enormous volume of business pressing upon that body. Aside from that, it seems to me that with comparatively few exceptions, the members of both parties, in both Houses, have been displaying a commendable readiness to do what they can to improve the economic situation of the country. I have been particularly impressed with the promptness of the action that has been secured thus far upon President Hoover's relief measures. I trust I am right in interpreting this situation as a favorable background and a hopeful setting for securing constructive legislation in the all-important field of transportation."

Winds Interfere with Freight Movement

Severe winds, which were reported to have been the most violent in 32 years, handicapped regular freight service in the northwest on January 13. Northern Pacific trains encountered the winds between Greycliff, Mont., and Big Timber, which made it necessary to split the trains in two to make headway against the gale. Some slight damage was caused by wind at Livingston, Mont., where a portion of the roof of the roundhouse was blown off.

Club Meetings

The New England Railroad Club will hold its next meeting at the Copley-Plaza Hotel, Boston, on Tuesday evening, February 19. J. E. Teal, Chesapeake & Ohio, will speak on Economics of Railway Operation. The meeting will be preceded by a banquet at 6:30 o'clock.

The Railway Club of Pittsburgh (Pa.) will hold its next meeting on Thursday evening, January 28, at the Fort Pitt Hotel, Pittsburgh. N. H. McKay, United States Chromium Corporation, will present a paper on chromium plating applications in the railway industry.

Elkins Law Violations

The Interstate Commerce Commission has announced that on January 19 the Oliver Farm Equipment Company, of Battle Creek, Mich., and the Michigan Central and the Grand Trunk Western, pleaded guilty in the federal court at Detroit to several counts of indictments charging violations of the Elkins act in the granting and acceptance of concessions and unlawful advances in the holding of carload shipments of farm equipment on request without the assessment of demurrage charges. Penalties totalling $35,000 were assessed on the basis of a minimum fine of $1000 for each count in the indictments.

Roads Seek Early Restoration of Grain Rates

Representatives of the western railroads have been in conference with the Bureau of Traffic of the Interstate Commerce Commission for several days in efforts to work out a plan for restoring as expeditiously as possible the rates on grain and grain products in the western district in effect on July 31, 1931, which were superseded by the commission's general revision which was recently set aside by order of the Supreme Court of the United States. The roads proposed to restore the old rates on five days' notice but many complications of tariff procedure are involved.

Restrictions on Consolidation Proposed by Senator Couzens

Senator Couzens has introduced in the Senate a new bill, S.3079, to give the Interstate Commerce Commission complete jurisdiction over any acquisition of control of a railroad, by carriers, individuals, or holding companies and proposing a large number of additional conditions to be taken into consideration by the commission before authorizing acquisitions or consolidations. The commission would also be given authority to require the divestment of stock holdings likely to hinder or prevent the consolidation of railroad properties in harmony with the commission's plan.

C. N. R. Shops to Work Three Weeks a Month

During January, February and March, the principal shops of the Canadian National will operate on a five-day week for three weeks of each month, commencing with the first Monday of every month, it was announced last week in Montreal by S. J. Hungerford, vice-president in charge of operation. The personnel concerned will number about 10,000 men. Previous to the beginning of this year the shops had been on a 36-hour week and the new time arrangement of forty hours per week for three weeks each month will bring about a reduction of approximately four days per month in working time.

Railway Employment in November

Railway Employees number only 1,169,229. A further reduction of over 56,000 in the number of railway employees in the service of Class I railways between the middle of October and the middle of November is shown in the Interstate Commerce Commission's monthly statistics of railway employment. The total in November was 1,169,229, a decrease of 16.15 per cent as compared with the corresponding month of 1930, and of approximately 168,000 since May, 1931, in which railway employment reached a peak for the year. The number in service in November is less than the railways had thirty years ago and represents a decrease of about 850,000 since the peak of 1920.

Bangor & Aroostook Cuts Wages; D. L. & W. Defers Action

Officers, shopmen and clerks of the Bangor & Aroostook have accepted a 10 per cent reduction in salaries and wages. The Bangor & Aroostook is one of the three eastern roads which are not represented by the committee of nine railway presidents now negotiating with union leaders in Chicago.

The Delaware, Lackawanna & Western has declined an offer of approximately

Continued on Next Left Hand Page

10,000 of its employees to accept a 10 per cent cut; the management desires that all employees be treated alike and thus deferred action pending the outcome of the Chicago conferences. The employees making the offer are members of the company's unions and unorganized labor.

Car Hire Settlement

The Interstate Commerce Commission has re-opened its investigation of the rules for car hire settlement for further hearing, in the light of the recent decision of the Supreme Court of the United States. This action is taken solely with a view to determining the fair apportionment of car hire costs between connecting carriers and common-carrier railroads (outside switching districts) which are less than 100 miles in length, and which return railroad-owned cars to the road from which they were received; or which receive cars for return loading with coal from mines that are customarily dependent upon connecting carriers for car supply. The commission's order had required a change in the per diem rules to allow the short line two days free time on freight in general and to require no car hire on the cars used for return loading with coal; and these features of the order were declared by the Supreme Court to be confiscatory in a decision rendered on November 23.

Truck-Competitive Cotton Rates Authorized

On petition of the southwestern railroads the Interstate Commerce Commission has issued a modification of its orders prescribing a rate structure on cotton, which prescribed a fixed relation between the rates from points in the Southwest to New Orleans and Mobile, so as to permit the carriers to maintain lower rates to New Orleans where such action is necessary to meet the competition of trucks or barges, without maintaining the relation prescribed in the rates to Mobile where corresponding reductions are not made necessary by similar competition. The original order was also modified so that the maintenance of equal rates to Houston, Galveston, and Texas City is required for distances in excess of 100 miles, instead of 200 miles, from Houston. The truck-competitive rates must be not less than 65 per cent of the maximum reasonable compressed-in-transit rates minus the compress charge prescribed in the original order.

Yale Railroad Researches

Yale University, New Haven, Conn., has inaugurated a program of research in the broader aspects of railway enterprise to be carried out under Howard E. Boardman, Dudley Professor of Railroad Engineering; the work to be carried on in cooperation with railroad companies and other agencies of transportation, and with other departments of the University. Graduate students will be trained in some of the practical engineering economic phases of present-day transportation problems. Professor Boardman is the first incumbent of the professorship provided by Mr. and Mrs. P. H. Dudley. The late Mr. Dudley was a well-known expert in rails and track construction and for many years was consulting engineer of the New York Central. Professor Boardman has served in the engineering department of the Pennsylvania, the Missouri Pacific, the New York Central and the Boston & Maine.

Canadian Merger Scored by King

(Continued from page 179)

continental Railway and at the same time be a profitable rate to the carriers."

Charges that Montreal had been neglected by both systems as the logical key to rapid transit of western wheat crops in competition with Buffalo, were raised by Seraphin Ouimet, civil engineer, in submitting his evidence at Montreal. He advocated construction of both a shorter Montreal link with transcontinental lines and of a joint underground railway terminal in the metropolis.

Officers of the Quebec Motor Highways Association appeared at the Montreal hearing to deny charges that motor competition had been responsible for existing railway conditions and to blame both railroads for competitive rivalry and extravagant investments in steamships, hotels, and pleasure resorts. Another witness urged the railways to adopt a recently developed rail bus made of aluminum, run by a gasoline engine and equipped with pneumatic tires. The Radio League submitted a memorandum urging the commission to recommend that the railways co-operate in radio broadcasting rights with Canadian Marconi and telephone interests, under federal government jurisdiction.

Witness Ouimet made five suggestions, as follows:

1. The ablation of many parallel lines and unprofitable lines, whatever local political influence may claim.
2. Recognition of the fact that speed is the most powerful factor in modern competition, and the linking of Montreal to the transcontinental lines by a shorter route, thus tying the wheat fields of the west to Montreal, the pivot of distribution, by a more direct link.
3. Immediate construction of a joint railway terminal in Montreal six miles long and based on the underground system, thus establishing the metropolis as the natural centre of distribution in Canada for the year round.
4. Elimination of "luxury routes" and eradication of any tendency towards fusion of both railways.
5. Care in handling the question of the development of the St. Lawrence waterways, it being illogical to construct canals more than twelve feet deep when they offer no income and tender the railways greater competition.

In the past, following great depressions, certain new industries or new developments in old industries have come forth as pacemakers for reviving business. After the depression of 10 years ago it was the shift from open to closed automobiles. The changes that will be brought about by the physical co-ordination of rail and motor transportation which, despite all financial ills of railroads, is rapidly going ahead, may well turn out to be a greater business-building force than is now generally realized. For one thing, such co-ordination will render obsolete a good share of all freight terminals.

Building of a nation-wide system of less-than-carload freight containers of truck body type will in itself be no small piece of manufacturing. It is coming.

—From The Business Week.

Carload Rates on Mixed Shipments Adopted by Western Railroads

A new and reduced basis of freight rates covering shipments in varying weight quantities, regardless of the present less-than-carload classification rating, to apply on freight of practically all kinds except perishable commodities, was adopted on January 13 at a conference of western railroads. The plan, which is intended to offset motor truck competition, was first placed in effect by the Chicago, Milwaukee, St. Paul & Pacific and the Chicago & North Western between Chicago and Milwaukee, Wis., and will be put into effect on other roads as soon as rate sheets can be compiled. It will apply, generally, west of Chicago, Milwaukee, and Green Bay, Wis. to and including points on the Missouri river and east of a line drawn from Sioux Falls, S. D., to the head of Lake Superior. The plan adopted affords a common rate in disregard of the actual classification of the articles comprising the shipment when tendered to the railroads in lots of 12,000 lb., 25,000 lb. and 40,000 lb. or more. The basic rate is reduced in proportion to the increase in the weight of the shipment. Loading and unloading will be performed by the shipper and consignee under the new arrangement and the present carload classification requirements as to packing will apply.

Railway Advertising Agents Meet

Discussion of means of reducing railway advertising expenses with the least reduction in the effectiveness of the advertising, marked the annual meeting of the American Association of Railway Advertising Agents, which was held in Chicago on January 17, with the president, Ray Maxwell, advertising manager of the Missouri Pacific, presiding. Nearly all of the important lines in the United States and Canada were represented.

The following officers, to serve during the ensuing year, were elected: President, H. F. McLaury, advertising mana-

Continued on Next Left Hand Page

ger, Chicago, Burlington & Quincy; vice-presidents, O. J. McGillis, advertising manager, Great Northern; W. W. Rodie, advertising manager, Chicago, Rock Island & Pacific; H. B. Northcott, advertising manager, Union Pacific; Holcombe Parkes, advertising manager, Norfolk & Western; Ernest E. Evans, assistant general publicity agent, Canadian Pacific; treasurer, H. P. Riccadonna, advertising manager, Chicago Great Western; secretary, E. A. Abbott, Poole Bros., Inc.

Missouri Court Decision Reversed In Employers' Liability Case

On August 26, 1930, Curtis, then residing in Missouri, brought an action in the Jackson County Circuit Court, Missouri, against the Santa Fe and the Denver & Rio Grande Western under the Federal Employers' Liability Act for damages for personal injuries said to have resulted from their joint negligence on December 26, 1929, while he was employed by them at an interlocking signal plant near Pueblo, Col. The railroads petitioned the Supreme Court of Missouri to prohibit further prosecution of the action as resulting in an undue burden on interstate commerce and violation of the Federal Constitution. Judgment denying the prohibition was brought before the United States Supreme Court on writ of certiorari.

It appeared that properly to defend the cause would require attendance of witnesses from Colorado at great expense; also the attendance of some witnesses for the plaintiff, who resided in Missouri. The Santa Fe operates in Missouri and is licensed to do business in that state. The Rio Grande does not operate any line in Missouri and is not licensed to do business in that state.

The Supreme Court holds that the prohibition was properly refused as to the Santa Fe, but that the Rio Grande properly claimed exemption from suit in Jackson County. The prohibition against burdening interstate commerce cannot be avoided by the simple device of a joint action, or by attaching the property of the non-resident railroad corporation. As a practical matter, it is also held that "courts could not undertake to ascertain in advance of trial the number and importance of probable witnesses within and without the state and retain or refuse jurisdiction according to the relative inconvenience of the parties." The judgment of the state Supreme Court was reversed and the cause remanded for further proceedings.—Denver & Rio Grande Western v. Terte. Decided January 4, 1932. Opinion by Mr. Justice McReynolds.

Railroad Porter Handling Mail Is Not Working For Railroad

A railway postal clerk sued the Yazoo & Mississippi Valley and the Illinois Central for injury due to the alleged negligence of a porter in the general service of these two companies. Hunter, the porter, was also made defendant. He was hired and paid by the Illinois Central. At the time of the injury he was loading United States mail into a mail car under the division of a postal transfer clerk, and was not, as to that work, under the direction or control of either of the railroad companies.

The Mississippi Supreme Court reversed, as to the railroad companies, a judgment against all the defendants on the ground that what Hunter was doing at the time of his alleged negligent act was not for them but for the United States. This is affirmed by the Supreme Court of the United States.

The court says that the statutory obligation imposed upon the railroad carriers by c.261, sec. 5, 39 Stat. 412, 429, U. S. C. A., Title 39, sec. 541, is simply to transport mail offered for transportation by the United States. They are not required to handle, load or receive mail matter, but only to furnish the men necessary for those purposes. The men so furnished handle the mails and load them into, and receive them from, the railway post office cars, as the regulation of the Postmaster General, adopted by authority of the statute, section 1293, prescribes, "under the direction of the transfer clerk, or clerk in charge of the car."

The work they do, the court says, is that of the government. The court does not accept the dictum that "direction" means nothing more than the right to point out or indicate to the men the disposition to be made of the mail. The scope of the word, as it is here used, is not to be thus limited. The phrase "under the direction of the transfer clerk" would be practically meaningless unless it comprehended the power to supervise and control the movement. "Obviously, as the evidence shows, a direction by the transfer clerk carries with it the duty, on the part of the men directed, to obey, and has, and was intended to have, the force of a command." Denton v. Yazoo & Mississippi Valley, et al. Decided January 4, 1932. Opinion by Mr. Justice Sutherland.

Automatic Train Control Orders Temporarily Suspended for Great Northern

The Interstate Commerce Commission has granted the petition of the Great Northern that its automatic train control orders of June 13, 1922, and January 14, 1924, requiring installation of automatic train-stop devices between New Rockford and Williston, N. D., be set aside, to the extent of suspending the orders until further order of the commission. This was done on a finding that "in view of the low traffic density, the unfavorable physical characteristics of the road and terrain, the relative moderate rates of speed, the record of safety, and the freedom from accidents of the character which this device is designed to prevent, at the present time operating conditions on these divisions do not require the maintenance and operation of automatic train-stop devices."

The direct cost of maintaining and operating the devices for the three years ended December 31, 1930, was $54,518, but other expenses are also involved.

Foreign

Central Argentine Suburban Electrification Completed

The longest and most extensive electrified broad gage (5 ft. 6 in.) railway suburban service in the world, and the longest stretch of electric suburban track in South America was opened to public service on December 1 when the Central Argentine Railway inaugurated its completed electric service from Retiro station in Buenos Aires to Villa Ballester. This, added to the electric service to Tigre river which has been in effect since 1916, makes a total of 112 miles of electrified track in the suburban area around Buenos Aires.

A special train, decorated with flags and flowers, conducted a large party of government and railway officers from Retiro to Kilometer 24, a short distance past Villa Ballester, where the inaugural ceremony took place.

Seventy-fifth Anniversary, Swedish Railways

The closing month of 1931 marked the seventy-fifth anniversary of the Swedish railway system, which had its beginning in two short stretches of line first opened to traffic on December 1, 1856, according to Modern Transport (London). Today there are in Sweden some 17,000 kilometers (10,563 miles) of line, or approximately 26 kilometers for every 10,000 inhabitants, more than in any other European country. Of this mileage, 6,715 kilometers (4,170 miles) are owned and operated by the government, the remainder being privately controlled. Gross income for 1930 totaled 342,000,000 kroner (about $91,656,000), yielding a net of 59,000,000 kroner ($15,812,000) on a total capital investment of 1,134,000,000 kroner (approximately $303,912,000). Increasing traffic, plus an abundance of available water power, has made electrification on a large scale economically desirable, and additional electrified mileage is now under construction, while automatic signaling, automatic train control and other technical improvements are also being rapidly extended.

Record of Cheltenham Flyer

The Cheltenham Flyer, of the Great Western of Great Britain, scheduled to run from Swindon to London, 77½ miles in 67 minutes, and called the fastest train in the world, has made a record in the first three months that the above schedule has been effective of 6,008 miles in 5,233½ minutes or 7½ minutes over the total of the schedules for the runs. This record has been made notwithstanding the necessity of reduction of speed at points where alterations in the track are going on. On several occasions the train has run through in less than one hour. The Railway Gazette (London) says that the train has attracted world-wide attention for its speed, consistency, and extremely smooth running. "It has been

Continued on Next Left Hand Page

filmed from the track, the air, and the train itself; photographed at nearly every bridge and mile of its route, and has been pictured in every part of the globe. Every passenger travelling on the train may have, if he so wishes, affixed to his baggage, a label reproduction of the train itself. People from nearly every nation are numbered among the 8,000 passengers who can claim the distinction of travelling on this train, and many have made the journey to Swindon or Cheltenham for this express purpose. Throughout its route the train comes under the company's system of automatic train control which has played an important part in the time-keeping, especially during foggy weather."

Equipment and Supplies

FREIGHT CARS

The Cudahy Packing Company has ordered steel parts for 25 underframes from the Pullman Car & Manufacturing Corporation.

The North American Car Corporation has ordered nine tank cars from the American Car & Foundry Company. Four of these cars will have a capacity of 4,500 gal., two of 6,000 gal., two of 6,500 gal. and one of 6,000 gal. with three compartments.

PASSENGER CARS

The Reading Company has ordered 28 multiple-unit coaches and two multiple-unit passenger and baggage cars from the Bethlehem Steel Company. Inquiry for this equipment was reported in the *Railway Age* of November 14.

IRON & STEEL

The Maine Central contemplates buying 1,000 tons of rail and about 45,000 rail anchors.

The Delaware, Lackawanna & Western has ordered 4,000 tons of 130-lb. steel rail from the Bethlehem Steel Corporation.

The Erie has ordered 18,950 tons of rail from the Carnegie Steel Company. According to reports the railroad has placed orders for a total of 31,377 tons, including the Carnegie order.

SIGNALING

The Reading Company has contracted with the Union Switch & Signal Company for the installation of centralized traffic control apparatus for the operation of the switches and signals at the east end of a middle siding at Ewing, N. J., to take the place of a mechanical interlocking. The C. T. C. machine will be fixed at CN Tower, three miles from Ewing.

Supply Trade

Mark C. Bates, a director of the **Ryan Car Company,** Chicago, has been elected vice-president.

Effective January 14, **John H. Van-Deventer** became editor of **The Iron Age** succeeding **W. W. Macon,** who remains as consulting editor.

The Industrial Brownhoist Corporation, Cleveland, Ohio, has moved its general offices to Bay City, Mich., but will maintain a district sales office at 4403 St. Clair avenue, Cleveland, Ohio.

P. H. Gilleland, manager of the Railroad division of **Fairbanks, Morse & Co.,** Chicago, resigned on December 31, 1931, after 12 years with this company, and will take an extended vacation trip before returning to active business.

Chester H. Lang, former assistant manager of the publicity department and later comptroller of the budget of the **General Electric Company,** Schenectady, N. Y., has been appointed manager of the publicity department to succeeed **Martin P. Rice,** who retired December 31, after more than 37 years of service with the company.

J. R. C. Hintz has been appointed district manager, railway sales department, **Detroit Graphite Company,** with headquarters at 386 Fourth avenue, New York. Mr. Hintz was formerly with the Detroit Graphite Company as railway sales representative and later joined Benjamin Moore & Company, New York, in the same capacity.

Williams, White & Company, Moline Ill., have acquired the assets and good will of the **Rock River Engineering Works,** Janesville, Wis., and will continue to manufacture its line of bending rolls, hydraulic straightening presses and hydraulic molding presses. **G. H. Case,** former owner and manager of the Rock River company, will be associated in the future with Williams, White & Company.

James H. Drew has opened an office in the Midland Bank building, Cleveland, Ohio, and will represent the **Westinghouse Electric & Manufacturing Company** in the sale of line material and rail bonds in the states of Kentucky, Ohio, Indiana, Illinois and Michigan. He will also represent other manufacturers of products used by steam railways, electric railways and motor bus equipment.

Harvey S. Firestone, president of the **Firestone Tire & Rubber Company,** has been elected chairman of the board of directors and **J. W. Thomas,** vice-president since 1919 and vice-president and general manager since 1928 has been elected president. Other recent changes in the Firestone organization include the election of **Russell A. Firestone** to the board of directors and the promotion of **Ross J. Cope,** former vice-president and general manager, of the Firestone Tire & Rubber Company of California, to the presidency of that company.

The Philip Carey Company, Cincinnati, Ohio, has made arrangements with the **American Hair & Felt Company,** Chicago, for the sale of its products to railroads and railroad equipment companies through the latter concern under the direction of **James C. Younglove,** general manager, transportation and government division, American Hair & Felt Company and the **Dry Zero Corporation,** with headquarters at Chicago.

J. K. B. Hare, who has been engaged for some time in sales and engineering activities with both the Westinghouse air brake and electric companies, and whose headquarters, with the **Westinghouse Electric & Manufacturing Company,** until recently have been in New York, has been appointed transportation manager of the Westinghouse central district and is now located in the Grant building, Pittsburgh, Pa. In his new position Mr. Hare will have charge of all the company's activities in transpor-

J. K. B. Hare

tation matters in a territory which includes Michigan, Ohio, Kentucky, Western Pennsylvania and part of West Virginia. Mr. Hare is a native of Pittsburgh, and has been with Westinghouse Electric & Manufacturing Company since 1919. He served as an officer in the World War, during which he rose to a captaincy in the 163rd brigade. Previous to his enlistment in the army, in 1917, he was with the Westinghouse Air Brake Company, having associated himself with that company in 1912.

Carl H. Beck has been appointed eastern manager of the **Westinghouse Air Brake Company** with headquarters at New York, to succeed H. B. Gardner, deceased. Mr. Beck was graduated from the Pennsylvania State College in 1905 with a B. S. degree and in 1911 received

Continued on Next Left Hand Page

his M. E. degree from the same college. He entered the employ of the Westinghouse Air Brake Company as a special apprentice in 1905, and after filling special shop and field assignments was transferred to the St. Louis office in 1907, serving as steam road inspector. In 1909 he was promoted to representative for the Westinghouse Traction Brake Company in the same city, which position he held until 1919 when he was made special representative of the Safety

Carl H. Beck

Car Devices Company, at Wilmerding, Pa. In 1920 Mr. Beck was appointed assistant eastern manager of the Westinghouse Air Brake Company. In July, 1927, he was appointed general sales manager of the company with headquarters at Wilmerding; this position was temporarily discontinued in May, 1931, and Mr. Beck returned to New York as a special representative. He now assumes responsibility of the eastern district with the title of eastern manager.

OBITUARY

Dute Brown, sales engineer at St. Louis, Mo., of the Southern Wheel Company, New York, died on January 18 in a hospital at St. Louis, at the age of 37. Mr. Brown had been in the employ of the Southern Wheel Company since 1918, and previous to that time had served with the American Car & Foundry Company at St. Louis.

TRADE PUBLICATION

MODELS.—"Technical Models for Every Trade and Purpose" is the title of a 10-page booklet issued by the Paul F. Hermann Company, Keenan building, Pittsburgh, Pa. Models for transportation companies, for bridge construction companies, for railroads, for electric locomotive builders, etc., are illustrated in this booklet. The models are manufactured to any desired scale, either stationary or operating, for sales, exhibition or museum purposes. Cut sections can also be provided.

Construction

DENVER PACIFIC.—The Interstate Commerce Commission has authorized the Union Pacific, the Oregon Short Line, the Los Angeles & Salt Lake, and the Denver & Rio Grande Western to intervene in the proceedings on the application filed by this newly-organized company for a certificate authorizing it to build a railroad from Denver, Colo., to Los Angeles, Cal. The intervening petition of the D. & R. G. W. described the plan as "a mere fanciful promotion scheme without substance or merit from the standpoint of either the public or investors." The filing of the application was preceded by a considerable amount of correspondence between Coleman Crenshaw, of Salt Lake City, president of the company, and the commission's Bureau of Finance, before it was brought into conformity with the commission's rules of practice, which require that a company be incorporated before the application is formally received. The applicant was also advised that it must select one of the two alternative routes shown on its map around Grand Canyon National Park.

GREAT NORTHERN.—A contract has been awarded to A. Guthrie & Company, Portland, Ore., for the construction of a number of terminal buildings at Bend, Ore. The Pittsburgh-Des Moines Steel Company, Pittsburgh, Pa., has been awarded a contract for the construction of a fuel oil tank and a water tank at the same point.

NATIONAL RAILROAD OF HONDURAS.—The government of Honduras is contemplating the construction of 200 miles of line to supplement the present 70-mile system of the National of Honduras, which reaches from Puerto Cortes, on the Gulf of Honduras, to Potrerillos. The contemplated line will extend from the latter point through Comayagua to Amapala on the Gulf of Fonseca on the Pacific coast.

PUBLIC SERVICE COMMISSION OF NEW YORK.—The New York Public Service Commission has approved specifications and cost estimates for the elimination of Butts crossing of the New York Central, one mile northeast of Gabriels station, Brighton, N. Y.; and of the Rotterdam Junction-Pattersonville highway crossing of the Boston & Maine at Rotterdam Junction, N. Y. The commission has also approved revised plans and cost estimates for the elimination of the Kelly crossing of the Erie in Erwin, N. Y.

PUBLIC UTILITY COMMISSIONERS OF NEW JERSEY.—The New Jersey Board of Public Utility Commissioners has initiated proceedings for the elimination of five railroad-highway grade crossings in that state. The crossings and the railroad companies affected, together with the dates on which hearings to consider the various projects will be held, are as follows: Broadway, Long Branch, New York & Long Branch, Feb. 10; Wagaraw road, Hawthorne, Erie, Feb. 17; Van Houten avenue, Clifton, Erie, Feb. 17; Comly road, Lincoln Park, Delaware, Lackawanna & Western, Feb. 24; and Chestnut street, Roselle Park, Lehigh Valley, Feb. 24.

SPOKANE, PORTLAND & SEATTLE.—A contract has been awarded to J. H. Pomeroy, Portland, Ore., for erecting the steel superstructure of a new 350-ft. bridge at Washtucna, Wash., the remainder of the work having been done by company forces. The bridge has a total estimated cost of $50,000.

TEXAS & NEW ORLEANS.—The Interstate Commerce Commission has authorized this company to build a line extending from Clesne, La., east approximately 2.82 miles to a point on Lake Peigneur, to serve a sulphur mining plant now under construction by the Jefferson Lake Oil Co., Inc., but has denied the railroad's application to retain excess earnings from the operation of the branch. Estimated cost of the new line is $43,909.

Financial

BALTIMORE & EASTERN.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon about a mile of its line extending southwest from Vienna, Md.

CHICAGO, ROCK ISLAND & PACIFIC-ST. LOUIS-SAN FRANCISCO.—*Hearing on Stock Purchases.*—The Interstate Commerce Commission has postponed from January 20 to February 24 the hearing in connection with its investigation of the purchase by the Rock Island of 25,000 shares of stock of the Frisco and by the Frisco of 25,000 shares of stock of the Gulf, Mobile & Northern. The hearing is to be at New York before C. V. Burnside, assistant director of the Bureau of Finance.

FLORIDA EAST COAST.—*Car Ferry Service.*—The Overseas Railways, Inc., has petitioned the Interstate Commerce Commission to dismiss or postpone action on the application of the Florida East Coast and the Florida East Coast Car Ferry Company to establish a car ferry service between New Orleans and Havana, stating that the latter company had advised the commissioners of the port of New Orleans that, in view of the awarding by the United States government of a mail contract to the Seatrain Lines, Inc., for service between New Orleans and Havana and the granting by the Shipping Board of a construction loan to the same company for the construction of two additional car ferries, it would not be possible for the F. E. C. company to further consider at this time its proposed service. The commission is asked either to dismiss the application, which was opposed by the Overseas company, or to postpone proceedings until the F. E. C. advises its definite intention to proceed with the service. Examiner Howell, of the commission, has submitted a proposed report

Continued on Next Left Hand Page

recommending granting of the application, but while the case was pending before the commission the Seatrain Lines, a subsidiary of Overseas Railways, obtained the mail contract and a loan to enable it to extend its own service.

MOBILE & OHIO.—*Notes.*—This company has applied to the Interstate Commerce Commission for authority to issue $3,000,000 of promissory notes maturing before January 13, 1934.

NEW YORK CENTRAL.—*Acquisition.*—The Interstate Commerce Commission has issued a final order finding that public convenience and necessity require this company to acquire and operate the property of the Ulster & Delaware at a price not exceeding $2,500,000. This is the amount fixed by the commission as representing the commercial value of the property and has been accepted by the Ulster & Delaware.

PENNSYLVANIA.—*Bonds.*—The Interstate Commerce Commission has authorized the Philadelphia, Baltimore & Washington to issue $5,000,000 of general mortgage 5 per cent gold bonds to be delivered to the Pennsylvania, in lieu of a like amount of 4½ per cent bonds.

PENNSYLVANIA.—*Panhandle Bonds.*—The Interstate Commerce Commission has authorized the Pittsburgh, Cincinnati, Chicago & St. Louis to issue $1,000,000 of 5 per cent, series D, general mortgage bonds, to be delivered to the Pennsylvania at par in partial reimbursement for capital expenditures.

Connecting Railway Bonds.—The Commission has authorized this company to issue $934,000 of first mortgage 5 per cent bonds to be delivered to the Pennsylvania in satisfaction of indebtedness for capital advances.

Pennsylvania, Ohio & Detroit Bonds.—The Commission has authorized this company to issue $3,242,000 of 5 per cent first and refunding mortgage bonds, series B, in lieu of a like amount of 4½ per cent bonds, the bonds to be delivered to the Pennsylvania in partial reimbursement for capital advances.

WABASH.—*Equipment Trust.*—Evans, Stillman & Co., members of the New York Stock Exchange, have announced that they will seek to prevent payment of interest on this company's second mortgage 5 per cent bonds, due February 1, unless interest on equipment trust certificates is paid. The company defaulted on three equipment trust series on the day of its receivership, but has subsequently paid interest on several issues of bonds and notes.

Average Prices of Stocks and of Bonds

	Jan. 19	Last week	Last year
Average price of 20 representative railway stocks..	35.40	34.63	89.61
Average price of 20 representative railway bonds..	70.94	70.75	94.07

Dividends Declared

Cleveland, Cincinnati, Chicago & St. Louis.—Common, 5 per cent, payable January 30 to holders of record January 21.

Railway Officers

EXECUTIVE

W. A. Colston, vice-president and general counsel of the New York, Chicago & St. Louis, has been appointed vice-president, corporate relations, and **J. H. Agate,** assistant general counsel, has been appointed assistant to Mr. Colston. The position of vice-president and general counsel has been abolished.

FINANCIAL, LEGAL AND ACCOUNTING

W. J. Stevenson, assistant general counsel of the New York, Chicago & St. Louis, has been appointed general solicitor, in charge of the law department. The positions of assistant general counsel and general attorney have been abolished.

S. R. Prince, general solicitor of the Southern, has been appointed general counsel, succeeding **L. E. Jeffries,** deceased. **S. S. Alderman,** and **John B. Hyde,** general attorney, have been appointed general solicitors. All will have headquarters at Washington, D. C., as before.

J. F. Wade, auditor of passenger receipts of the Chicago Great Western, with headquarters at Chicago, has been appointed to the newly-created position of auditor of freight and passenger receipts, in which position, in addition to his former duties, he will take over those of **F. B. Longfield,** auditor of freight receipts, who died on January 16.

OPERATING

G. L. Ossmann, assistant superintendent of car service of the Chicago, St. Paul, Minneapolis & Omaha, has moved his headquarters from Chicago to St. Paul, Minn.

F. A. Roberson, trainmaster on the Joplin division of the Missouri Pacific, with headquarters at Nevada, Mo., has been transferred to the Eastern division, with headquarters at Jefferson City Mo., succeeding **E. E. Carter,** who has been assigned to other duties. The position of trainmaster at Nevada has been abolished and the duties assumed by **E. M. Bishop,** also trainmaster at Nevada. **L. H. Dillie,** trainmaster with headquarters at Falls City, Neb., has been transferred to the Northern Kansas division, with headquarters at Concordia, Kan., succeeding **G. B. Howden,** who has been appointed assistant trainmaster-general yardmaster, at Atchison, Kan. The position of trainmaster at Falls City has been abolished.

Effective January 16, six operating divisions of the Wabash were consolidated into three. The Peru and Detroit divisions have been merged under the name of the Montpelier division, while the Springfield division, which recently was consolidated with the Western division, has now become a part of the Decatur division. The Western division has been merged with the Moberly division. **R. A. Messmore,** superintendent of the Moberly division, with headquarters at Moberly, Mo., has been transferred to the Montpelier division, with headquarters at Montpelier, Ohio. **A. F. Helm,** superintendent of the Decatur division, has been appointed superintendent of the combined Decatur and Springfield divisions, with headquarters as before at Decatur, Ill. **W. W. Greenland,** superintendent of the Western division, with headquarters at Moberly, Mo., becomes superintendent of the combined Western and Moberly divisions, with the same headquarters. **H. O. Kelly,** superintendent of the Peru division, has been appointed trainmaster, with headquarters as before at Peru, Ind., while **C. A. Johnston,** superintendent of the Detroit division, with headquarters at Montpelier, Ohio, has been assigned to other duties.

TRAFFIC

E. B. Farrell, freight traffic manager on the Mobile & Ohio, has moved his headquarters from St. Louis, Mo., to Mobile, Ala.

Robert E. Larmour, general freight agent of the Canadian Pacific, has been transferred from Montreal, Que., to Toronto, Ont.

J. P. Blanton has been appointed assistant traffic manager of the American Short Line Railroad Association, with headquarters at Atlanta, Ga., succeeding **R. S. Reese.**

Charles R. Deets has been appointed general agent, traffic and operating departments, on the New York, Chicago & St. Louis, at Lafayette, Ind., a newly-created position.

J. C. Nolan, city passenger agent of the Western Pacific at Chicago, has been appointed to the newly-created position of assistant general passenger agent at the same point.

A. C. Johnson, who retired on June 1, 1929, as vice-president, traffic, of the Chicago & North Western, with headquarters at Chicago, has re-entered the service of this company as special representative at Rapid City, S. D.

W. G. Degelow, assistant in the traffic department of the St. Louis Southwestern, with headquarters at St. Louis, Mo., has been appointed to the newly-created position of assistant general traffic agent in charge of personnel and office management, with the same headquarters.

Joseph E. Gathman, traffic representative for the Delaware, Lackawanna & Western at Chicago, has been promoted to general agent at Portland, Ore.,

Continued on Next Left Hand Page

Motor Coach registrations in the United States for the first 10 months of 1931 (the latest figures available) show Whites in first-place among all high-grade coaches. White Coaches led their nearest competitor by more than 10% and in most cases twice as many were registered as by other manufacturers in the field.

These figures, which include every type of coach operation, emphasize the completeness of the White line—are conclusive evidence that successful operators depend upon Whites for greater profits.

No matter what your requirement, use Whites and your operating costs will be lower and your revenue larger. Before you buy—investigate White Coaches.

The White Company, Cleveland.

*These figures were compiled by R. L. Polk & Co.

White

COACHES

BRANCHES AND DEALERS IN ALL PRINCIPAL CITIES

where he succeeds **Lee H. Savage,** who has been transferred to Seattle, Wash., as noted in the *Railway Age* for January 9.

William D. Stubbs, general agent for the Illinois Central at Portland, Ore., has been promoted to the newly-created position of western traffic manager, with headquarters at San Francisco, Cal. Mr. Stubbs has been engaged in railway traffic work on the Pacific Coast for 35 years, 20 years of which have been with the Illinois Central at Portland. He was born on December 25, 1878, at San Francisco, and entered railway service in 1897 with the Southern Pacific at San Francisco. Subsequently, he served this company at Los Angeles, Cal., Seattle,

William D. Stubbs

Wash., and Portland, and on September 10, 1912, he entered the service of the Illinois Central as general agent at Portland. He held this position continuously until his appointment as western traffic manager at San Francisco, effective January 16.

C. L. Townsend, who has been promoted to general passenger agent on the Northern Pacific, with headquarters at

C. L. Townsend

Seattle, Wash., as noted in the *Railway Age* for January 9, has been associated with that road throughout his entire railway career of nearly 39 years. He entered the service of the Northern Pacific on May 1, 1893, as a messenger in the telegraph department at St. Paul, Minn., and from that time until June, 1928, he was advanced through a number of positions at the same point, serving as clerk in the transportation department, in the same position in the passenger department, as ticket stock clerk, rate clerk, district passenger agent, joint city passenger and ticket agent for the Northern Pacific and the Chicago, Burlington & Quincy, chief clerk in the passenger department, and as special passenger agent. In June, 1928, he was promoted to assistant general passenger agent at St. Paul, being transferred on January 1, 1931, to Seattle, Wash., where he was located at the time of his promotion to general passenger agent at that point, effective on January 1, 1932.

ENGINEERING AND SIGNALING

T. Turnbull, engineer maintenance of way of the Western region of the Canadian National, with headquarters at Winnipeg, Man., has retired.

J. F. Burns, assistant engineer maintenance of way of the Louisville & Nashville, with headquarters at Louisville, Ky., has retired from active service and the position of assistant engineer maintenance of way has been abolished.

W. S. Burnett, chief engineer of construction of the Cleveland, Cincinnati, Chicago & St. Louis, has been promoted to chief engineer, with headquarters as before at Cincinnati, Ohio, to succeed **Hadley Baldwin,** appointed special engineer at Cincinnati. The position of chief engineer of construction has been abolished.

R. A. Sheets, signal engineer of the Chicago & North Western, with headquarters at Chicago, has been appointed signal and electrical engineer, and **J. A. Andreucetti,** electrical engineer, has been appointed assistant electrical engineer, with headquarters as before at Chicago. The position of electrical engineer has been abolished.

W. H. Hulsizer, valuation engineer of the Union Pacific Railroad, with headquarters at Omaha, Neb., has been promoted to valuation officer of the Union Pacific System, succeeding **G. P. Turner,** deceased. Mr. Hulsizer was born on September 25, 1885, at Flemington, N. J. He graduated from Princeton University in 1907 with a degree in civil engineering, and until 1910 engaged in various capacities on building construction work in northern New York and Canada and later on railroad location work. In May, 1910, Mr. Hulsizer entered the service of the Union Pacific as a special clerk in the valuation bureau of the engineering department and has been engaged in various capacities either in the latter department or the valuation department since that date. He was appointed valuation engi-

W. H. Hulsizer

neer of the Union Pacific Railroad in August, 1924, and has held that position until his present promotion.

PURCHASES AND STORES

William McMaster, purchasing agent of the Chicago River & Indiana and the Indiana Harbor Belt, has moved his headquarters from Chicago to Gibson, Ind.

H. C. Pearce, who resigned on November 1, 1931, as director of purchases and stores of the Chesapeake & Ohio and the Pere Marquette, with headquarters at Cleveland, Ohio, has been appointed to the newly-created position of assistant to the general manager of the Chicago Great Western, in charge of materials and supplies, with headquarters at Oelwein, Iowa.

OBITUARY

G. P. Turner, valuation officer of the Union Pacific System, with headquarters at Omaha, Neb., died of a heart attack on January 9, at Omaha.

F. B. Longfield, auditor of freight receipts of the Chicago Great Western, with headquarters at Chicago, died on January 16 of uremic poisoning at his home in Chicago.

Herman D. Kooser, president of the American Refrigerator Transit Company, with headquarters at St. Louis, Mo., died at his home in Webster Grove, Mo., a suburb of St. Louis, on December 17.

C. H. Fake, who retired in 1918 as engineer maintenance of way of the Mississippi River & Bonne Terre (now part of the Missouri Pacific), died on December 31, at Salem, Ore., as the result of a stroke last August. From 1903 to 1914 Mr. Fake was chief engineer of the Mississippi River & Bonne Terre, being appointed engineer maintenance of way in the latter year.